ZIFF-DAVIS a SOFTBANK company

Sharing a Computer with Your Kids

FamilyPC

January 1999

www.familypc.com

Computer Survival Guide

Keep Your PC Safe from Viruses, Kids, Crashes, More

That's Entertainment! Your TV–PC Options

Build a Family Web Site (And Why You'd Want To)

Can You *Return* PCs and CD-ROMs?

‡The advertised monthly payment amount excludes taxes, shipping and handling charges. This monthly payment is based
repayment plan you qualify for and the cost of applicable shipping, handling, and taxes. Your minimum monthly payment a
time of a later advance. Your actual annual percentage rate is a fixed rate and will as low as 13.99%, 15.99%, 17.99% or 20.9
required. Rates and repayment terms are in effect as of October 1998 and are subject to change thereafter. The Micron Payr
©1999 Micron Electronics, Inc. All Rights reserved. Micron Electronics is not responsible for omissions or errors in typography or phot
not include return freight and original shipping/handling charges, applies only to Micron brand products and begins from date of shipme
made by a Micron service technician prior to the provision of on-site service. The Intel Inside Logo and Pentium are registered tradema
Micron products are trademarks or registered trademarks of Micron Electronics, Inc. Other product names used in this publication are
desktop and portable systems. *All hard drive sizes calculated with 1GB equal to 1 billion bytes. **For all Micron PCs configured with
rates may be less than the maximum potential. *** For all Micron Millennia desktop systems: The CD-ROM drive will be removed upo
ion is provided to individuals via the "Micron Card 6-Months Same-As-Cash Without-Payments" plan. If purchase advance and relate

WHAT DRIVES YOU TO WIN?

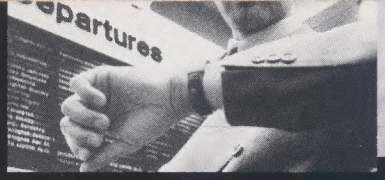
intel inside
pentium® II
PROCESSOR

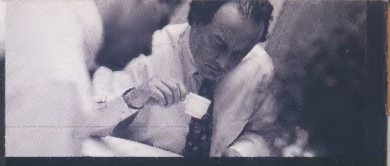
Winner takes all.
New Rules. New Tools.™

MICRON
ELECTRONICS

VOL. MP SEC. 04
99.1

Free Tuition! Micron University is our gift to you - the gift of knowledge.





WE'RE BUILDING POWERFUL USERS.

1. At Micron, we invest in you: buy any new Micron system and you're automatically enrolled in Micron U. You'll have access to hundreds of free*, online courses, seminars and tutorials on the hottest topics in computing, software and business today. Log in from any computer, 24 hours a day, 7 days a week. It's that easy and it's free of charge.

MICRON U - HERE'S HOW IT WORKS:

2. Micron University offers two ways to learn: either with others in online, instructor-led classes, or on your own, at your own pace, with our self-study tutorials. Both offer comprehensive and flexible ways to become a more powerful PC user and better apply technology to your life.

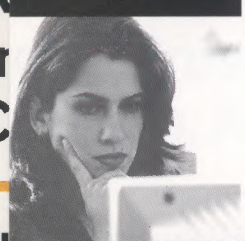
GET YOUR FAMILY ON THE INTERNET† THIS SEASON.

Be Smart.

"Micron doesn't seem to think that budget-class buyers should be excluded from the new CPU sweepstakes. So the company is offering its new, sleekly designed Millennia 450 at an impressively low price... I was knocked out by the Millennia 450's performance."

- *PC World Magazine*, August '98

Pay Less.



Get More.

"Micron University is a great idea. I have been able to learn things I knew were somewhere on the Web, but couldn't find. It's also available to me whenever I went."

Micron University freshman.

Get Ahead.

BREAKTHROUGH PRICE!
COMPLETE INTERNET-READY† 450MHz DESKTOP SYSTEM

$1,699

- Intel® Pentium® II processor 450MHz
- 64MB 100MHz SDRAM
- 8.4GB Ultra ATA hard drive◆
- 17" Micron display (15.9" display)
- 32X max speed CD-ROM drive
- 56K modem**
- 8MB SGRAM 3D AGP graphics
- Microsoft® Windows® 98
- Microsoft Office 97 Small Business Essentials
- #1 Ranked *PC World* Power Desktop Editors' Choice◊

MICRON'S EXCLUSIVE CONSUMER 6 NO PAYMENTS NO INTEREST 6 MONTH SAME AS CASH WITH MPOWER

Micron makes the Internet easy.

Every award-winning Micron™ Millennia® desktop arrives Internet-ready† right out of the box. That means you not only have the hardware you need, but the software as well. With Microsoft® Outlook for e-mail, and Microsoft Internet Explorer for everything from buying a new car to making travel reservations, you'll have everything you need to get the most from the Internet.

PC WORLD Best Buy — Millennia 350 Millennia 400 OVO — Sept '98 Oct '98

PC WORLD Best Buy — Millennia 400 MAX #1 Gaming System — Dec '98

PC WORLD Best Buy — Millennia 450 MAX Best Buy — Nov '98

PC WORLD Best Buy — Millennia 400 MAX #1 Power Desktop — Dec '98

Exclusive – Micron University – The Ultimate Learning Tool.

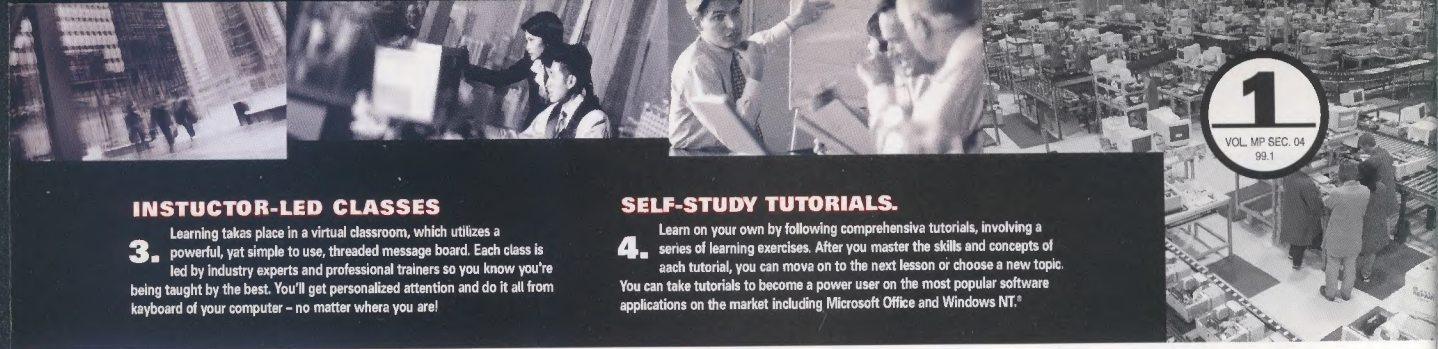
In our continuing effort to build not only powerful systems, but powerful users, we are proud to introduce Micron University. Offering hundreds of free* online, instructor-led classes, seminars and self-paced tutorials on the hottest topics in computing and business today, Micron University will turn any Micron owner into a highly educated power user. When you combine this powerful new tool with Micron's revolutionary MPower℠ purchase program, offering qualified users no interest‡‡ or payments for six months and our PowerXchange trade-in options, you get more than a great machine at a great price, you get a deal you probably won't find anywhere else. Call today to order your system or visit our Web site to find out more about Micron University.

‡The advertised monthly payment amount excludes taxes, shipping and handling charges. This monthly payment is based on a fixed Annual Percentage Rate of 13.99% with a repayment of the borrowed amount in 48 months. This is a revolving loan. Your monthly payment will differ depending upon the rate and repayment plan you qualify for and the cost of applicable shipping, handling, and taxes. Your minimum monthly payment and the amount of time required to pay outstanding amounts on your revolving loan account will initially be determined when you receive your first advance and will be re-calculated only at the time of a later advance. Your actual annual percentage rate is a fixed rate and will as low as 13.99%, 15.99%, 17.99% or 20.99%. Final approval and your rate are subject to verification of your credit, income, and loan amount which is based upon our normal underwriting guidelines. Minimum initial advance of $1000 is required. Rates and repayment terms are in effect as of October 1998 and are subject to change thereafter. The Micron Payment Plan is a financial service provided by Household Bank, f.s.b., a federal savings bank and an Equal Housing Lender. Household Bank is a registered mark of Household International, Inc.

©1999 Micron Electronics, Inc. All Rights reserved. Micron Electronics is not responsible for omissions or errors in typography or photography. All purchases are subject to availability. Prices and specifications may be changed without notice; prices do not include shipping and handling and any applicable taxes. 30-day money-back policy does not include return freight and original shipping/handling charges, applies only to Micron brand products and begins from date of shipment. All sales are controlled by Micron Electronics' current terms and conditions of sale. On-site service is provided at sole discretion of Micron Electronics, Inc. A diagnostic determination for on-site service must be made by a Micron service technician prior to the provision of on-site service. The Intel Inside Logo and Pentium are registered trademarks and Pentium II Xeon, Celeron and MMX are trademarks of Intel Corporation. Microsoft, Windows, Windows NT and the Windows logo are registered trademarks of Microsoft Corporation. Product names of Micron products are trademarks or registered trademarks of Micron Electronics, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies. Note: advertised configurations may differ from award-winning configurations. *One year free with purchase of new Micron desktop and portable systems. ◆All hard drive sizes calculated with 1GB equal to 1 billion bytes. **For all Micron PCs configured with 56Kbps modems: Maximum transmission speed of up to 56Kbps when downloading data and 33.6Kbps when uploading. However, actual performance is dependent upon numerous factors and observed transfer rates may be less than the maximum potential. *** For all Micron Millennia desktop systems: The CD-ROM drive will be removed upon the purchase of the DVD-ROM drive upgrade. ††The TransPort TREK 166MHz system was ranked #1 by *PCWorld*. At the time of ranking, the system was code-named "Micron Meridian." ‡‡‡Advertised financing is provided to individuals via the "Micron Card 6-Months Same-As-Cash Without-Payments" plan. If purchase advance and related charges are not paid in full within 180 days from the purchase date, finance charges will be assessed from purchase date. The APR varies and is 17.65% as of 8/25/98 with a minimum finance charge of $1.00. ◊Millennia 450 MAX reviewed *PC World* Nov. '98

A non-refundable up-front freight charge applies for participation in PowerXchange to cover cost of return packaging and processing.

†Contract with outside Internet Service Provider required. Internet service questions must be resolved by ISP and is not included.



INSTUCTOR-LED CLASSES

3. Learning takas place in a virtual classroom, which utilizes a powerful, yat simple to use, threaded message board. Each class is led by industry experts and professional trainers so you know you're being taught by the best. You'll get personalized attention and do it all from kayboard of your computer – no matter whera you are!

SELF-STUDY TUTORIALS.

4. Learn on your own by following comprehensiva tutorials, involving a series of learning exercises. After you master the skills and concepts of aach tutorial, you can mova on to the next lesson or choose a new topic. You can take tutorials to become a power user on the most popular software applications on the market including Microsoft Office and Windows NT.®

Award-Winning Complete Internet-Ready† 450MHz Systems Starting at Just $1,699

Model Name	Millennia C333	Millennia 350	Millennia 450 New!	Millennia 450 MAX New!	Millennia 450 MAX New!
Processor	Intel® Celeron™ processor 333MHz	Intel Pentium® II processor 350MHz	Intel Pentium II processor 450MHz	Intel Pentium II processor 450MHz	Intel Pentium II processor 450MHz
Cache	128KB internal L2 cache	512K8 internal L2 cache	512K8 internal L2 cache	512K8 internal L2 cache	512K8 internal L2 cache
RAM	32MB 5DRAM	64MB 100MHz SDRAM	64MB 100MHz 5DRAM	128MB 100MHz 5DRAM	128MB 100MHz SDRAM
Hard Drive	4.3GB Ultra ATA hard drive*	8.4G8 Ultra ATA hard drive*	8.4GB Ultra ATA hard drive*	13.6GB Ultra ATA hard drive*	14.4GB 7200RPM Ultra ATA hard drive*
Monitor	15" Micron 500Vx monitor (13.8" display)	17" Micron 700Vx monitor (15.9" display)	17" Micron 700Vx monitor (15.9" display)	19" Micron 900Lx monitor (18" display)	19" Micron 900Lx monitor (18" display)
DVD/CD-RDM	32X max speed CO-ROM drive	32X max speed CO-ROM drive	32X max speed CD-ROM drive	6X DVD III ROM drive	6X DVO III ROM drive
Modem	3Com U.S. Robotics 56K WinModem**	3Com U.S. Robotics 56K WinModem**	3Com U.S. Robotics 56K WinModem**	3Com U.S. Robotics 56K WinModem**	3Com U.S. Robotics 56K WinModem**
Graphics	nVidia Riva 12B, 4M8 SGRAM 30 AGP graphics	nVidia Riva 128, 4MB 5GRAM 30 AGP graphics	nVidia Riva 12B, 4M8 SGRAM 30 AGP graphics	16MB Diamond Viper 550 TNT 2X AGP graphics	16MB Diamond Viper 550 TNT 2X AGP graphics
Sound System	PCI 64-voice Wavetable sound	PCI 64-voice Wavetable sound	PCI 64-voice Wavetable sound	PCI 128-voice Wavetable sound	PCI 128-voice Wavetable sound
Warranty	5-year/3-year Micron Power™ limited warranty	5-year/3-year Micron Power limited warranty	5-year/3-year Micron Power limited warranty	5-year/3-year Micron Power limited warranty	5-year/3-year Micron Power limited warranty
Scholarship	1-year free* tuition to Micron U online	1-year free* tuition to Micron U online	1-year free* tuition to Micron U online	1-year free* tuition to Micron U online	1-year free* tuition to Micron U online
Software Included	Microsoft Windows 98 Microsoft Office 97 Small Business Edition Microsoft Outlook Microsoft Internet Explorer Norton AntiVirus	Microsoft Windows 98 Microsoft Office 97 Small Business Edition Microsoft Outlook Microsoft Internet Explorer Morton AntiVirus	Microsoft Windows 98 Microsoft Office 97 Small Business Edition Microsoft Outlook Microsoft Internet Explorer Morton AntiVirus	Microsoft Windows 98 Microsoft Office 97 Small Business Edition Microsoft Outlook Microsoft Internet Explorer Norton AntiVirus	Microsoft Windows 98 Microsoft Office 97 Small Business Edition Microsoft Outlook Microsoft Internet Explorer Morton AntiVirus
Also Includes:	New MicroTower™ case Advent AV009 stereo speakers 104-key enhanced keyboard Microsoft IntelliMouse® 3.5" floppy drive	New MicroTower case Advent AV009 stereo speakers 104-key enhanced keyboard Microsoft IntelliMouse 3.5" floppy drive	New MicroTower case Advent AV009 stereo speakers 104-key enhanced keyboard Microsoft IntelliMouse 3.5" floppy drive	Micron MiniTower case Advent AV009 stereo speakers 100MB Iomega Zip Drive 104-key enhanced keyboard Microsoft IntelliMouse 3.5" floppy drive	Micron MiniTower case Monsoon MM1000 flat panel speakers w/subwoofer 100MB Iomega Zip Drive 104-key enhanced keyboard Microsoft IntelliMouse 3.5" floppy drive
Price	$1,199 As Low As $32/mo.‡ Personal Payment Plan 48 mos.	$1,499 As Low As $40/mo.‡ Personal Payment Plan 48 mos.	$1,699 New Low Price! As Low As $46/mo.‡ Personal Payment Plan 48 mos.	$2,499 As Low As $68/mo.‡ Personal Payment Plan 48 mos.	$2,799 New Low Price! As Low As $76/mo.‡ Personal Payment Plan 48 mos.
Upgrade to:	Upgrade to: 64MB 5DRAM memory 6.4GB Ultra ATA hard drive 17" Micron 700Vx monitor (15.9" display) 100MB Iomega Zip drive	Upgrade to: 128MB SDRAM memory 10GB Ultra ATA hard drive 17" Micron Trinitron 700Tx monitor (16" display) 100MB Iomega Zip drive	Upgrade to: 128MB SDRAM memory 13.6GB Ultra ATA hard drive 19" Micron 900Lx monitor (18" display) 4.8X OVO III ROM drive	Upgrade to: Monsoon MM1000 flat panel speakers w/subwoofer 19" Micron Trinitron monitor (18" display)	Upgrade to: 256MB 100MHz SDRAM Microsoft Natural Keyboard Elite
Price	$1,475 As Low As $40/mo.‡ Personal Payment Plan 48 mos.	$1,912 As Low As $52/mo.‡ Personal Payment Plan 48 mos.	$2,211 New Low Price! As Low As $60/mo.‡ Personal Payment Plan 48 mos.	$2,787 As Low As $76/mo.‡ Personal Payment Plan 48 mos.	$3,114 New Low Price! As Low As $85/mo.‡ Personal Payment Plan 48 mos.

intel inside pentium® II

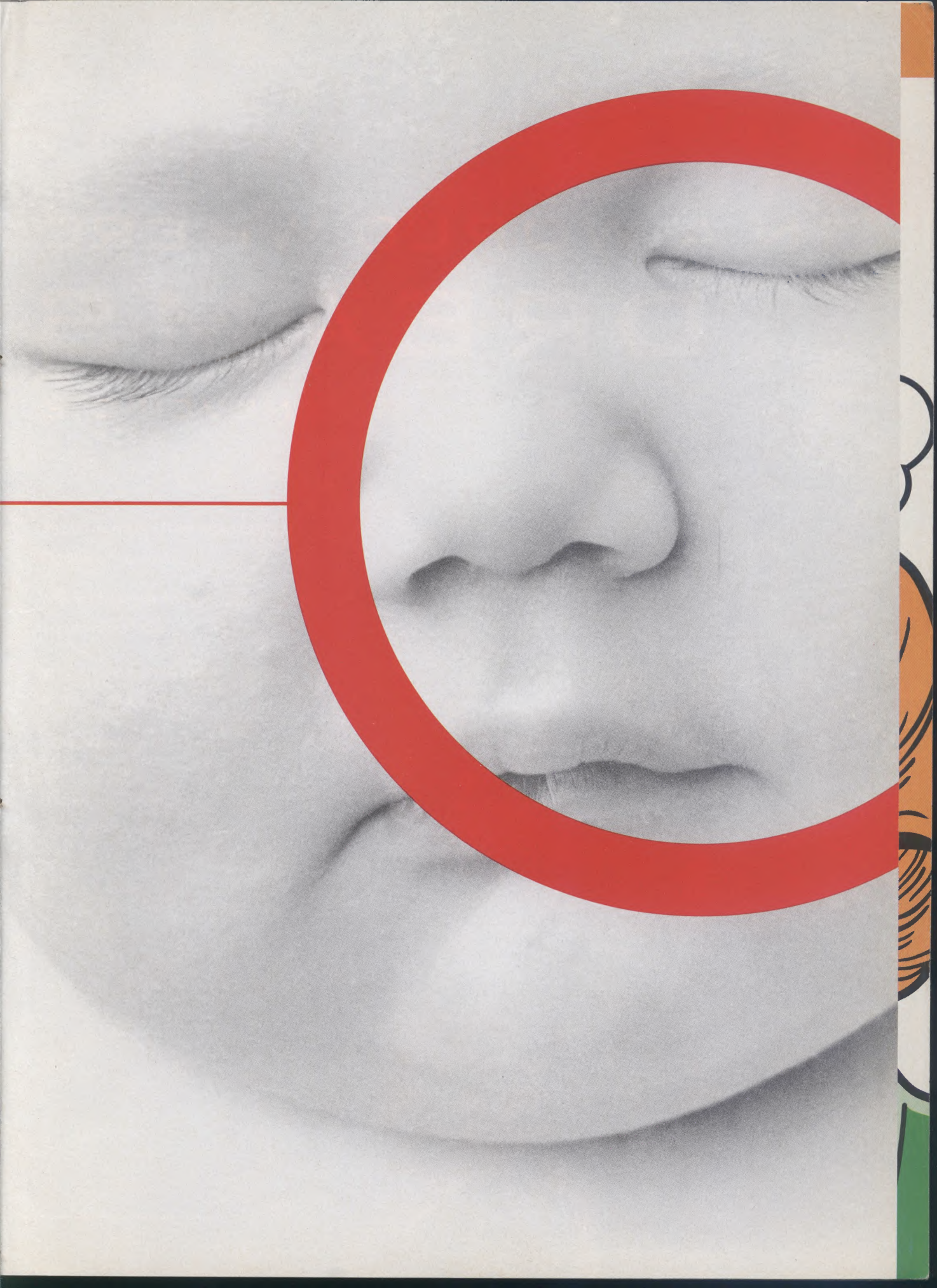
New Rules. New Tools.™

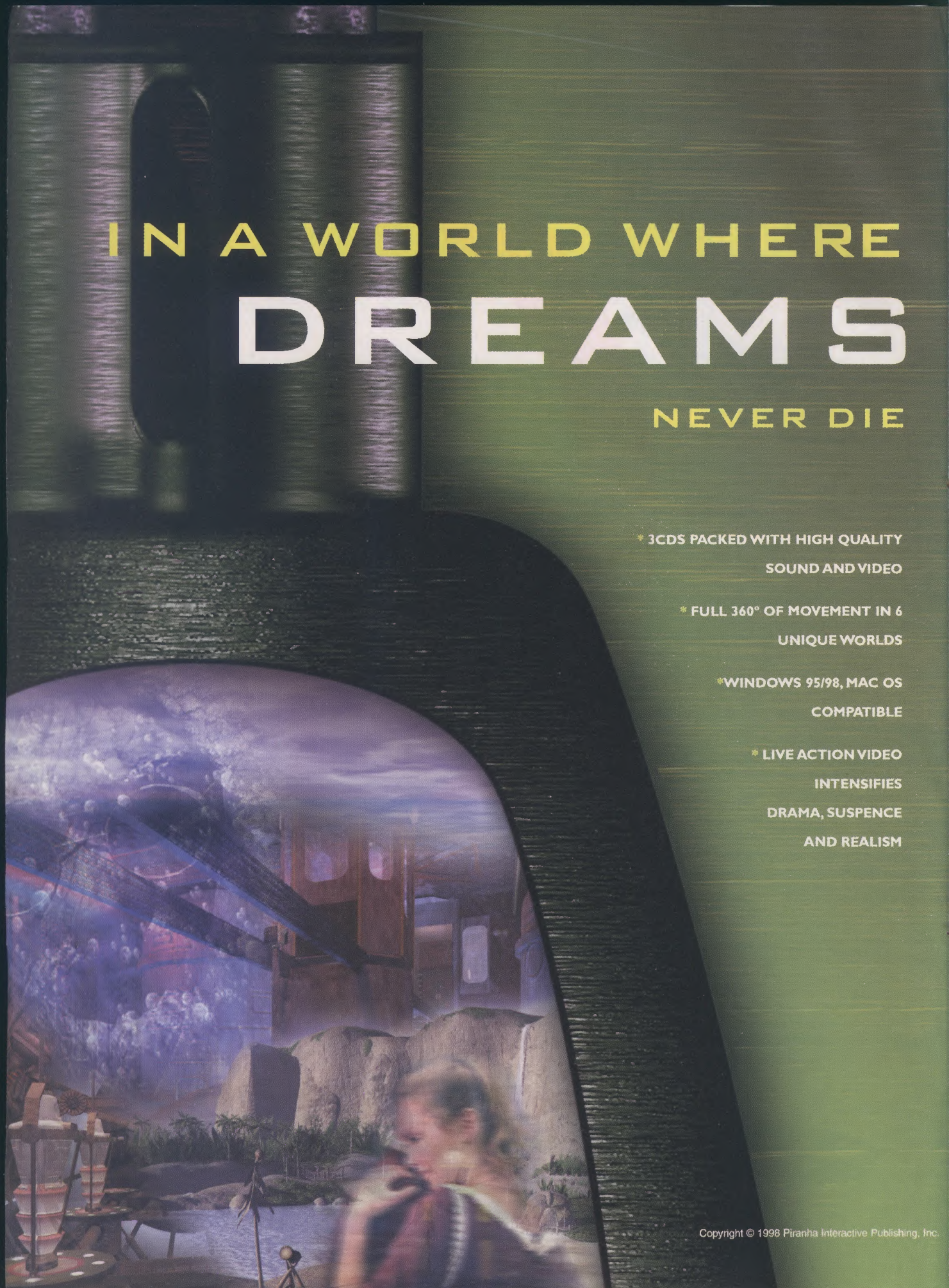
MICRON ELECTRONICS™

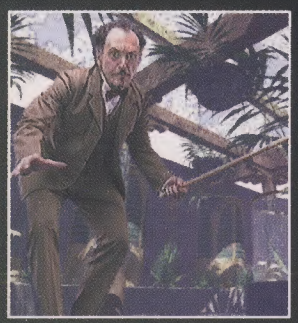
ORDER DIRECT 1-800-4 ...ols.™

Call toll-free or order online at www.micro

MICRON ELECTRONICS™




IN A WORLD WHERE
DREAMS
NEVER DIE
* 3CDS PACKED WITH HIGH QUALITY SOUND AND VIDEO
* FULL 360° OF MOVEMENT IN 6 UNIQUE WORLDS
*WINDOWS 95/98, MAC OS COMPATIBLE
* LIVE ACTION VIDEO INTENSIFIES DRAMA, SUSPENCE AND REALISM
Copyright © 1998 Piranha Interactive Publishing, Inc.



MORPHEUS

HOW DO YOU KNOW YOU'RE AWAKE?

Decipher the riddle of the neurographicon, a pod-like time machine that preserves dreams forever. Upon exploring each pod, you experience its prisoners' tragic lives through their dreams, ghosts and visions. The experience will have you quickly confusing the surreal with the real and sacrificing your own dream time for Morpheus time.

"Morpheus is a gorgeous looking game. Players will have more freedom to explore than thot offered by slideshow-style games such as Riven."
-Digital Entertainment Online

"A solid odventure game experience wherein the sum of the parts add up to an engrossing, challenging whole."
-JustAdventure.com

"Chorts new territory in the deep, moody, engrossing nature of the story and the breathtaking beauty of the grophics."
--Adrenaline Vault

demos latest info free stuff
WWW.MORPHEUSGAME.COM

Virgin Fry's TOYS"R"US Babbages EB COMPUSA THE COMPUTER SUPERSTORE

SOAP BUBBLE PRODUCTIONS

PIRANHA INTERACTIVE PUBLISHING

"...one of the best color ink jet printers ever made..."

"Text looked as if it came from a high-resolution laser printer."

"a steal at $250"

"We were impressed with the BJC-5000's bang-on color..."

The Canon BJC-5000 Color Bubble Jet™ Printer. The Ultimate Business Printing Machine.

- Fast, laser-quality black printing
- Huge 1800-page ink yield in black*
- Vibrant 1440 x 720 dpi color printing out of the box**
- Stunning 7-color photo printing***
- Flexible 4" x 6" to 11" x 17" paper support

Photo Realism

bring amazing photos home program

*Average yield based on two BC-23 Enhanced Black BJ Cartridges at 5% coverage. **1440 x 720 dpi requires optional specialty paper. ***7-color printing with optional BC-22e Photo Ink cartridge and specialty paper. Based on estimated street price. Dealer prices may vary.

PC Magazine liked our color printer so much, they put it in black and white.

We gave the editors at PC Magazine our BJC-5000 Color Bubble Jet printer for review. As you can see, what we received in return was pretty impressive. For more information, come and visit our Web site at www.ccsi.canon.com/2heads or give us a call at 1-800-OK-CANON.

See what we mean.™ Canon

© 1998 Canon Computer Systems, Inc. Canon and BJC are registered trademarks and Bubble Jet, PhotoRealism and "See What We Mean" are trademarks of Canon Inc. In Canada, call 1-800-263-1121. Quotes reprinted from PC Magazine, November 3, 1998. Copyright © 1998 ZD Inc. All Rights Reserved.

© 1998 Logitech. All rights reserved. Logitech, the Logitech logo and other Logitech marks are owned by Logitech and may be registered. Windows is a trademark of Microsoft Corporation in the United States and/or other countries which are used under license. All other trademarks are the property of their respective owners.

Be as comfortable by day as you are at night.

MouseMan® Wheel. With its melt-in-your-hand shape and four conveniently placed buttons, it's designed to make you as comfortable at your computer as you are in that other place you spend so much time. Only difference is, you'll be a lot more productive. That's because it's also designed for control. Its innovative scroll wheel lets you easily zoom and scroll in Windows® 95, Windows 98, and Windows NT® 4.0 applications, or on the Internet. Once you pick one up, you'll never put it down.

www.logitech.com

It's what you touch.™

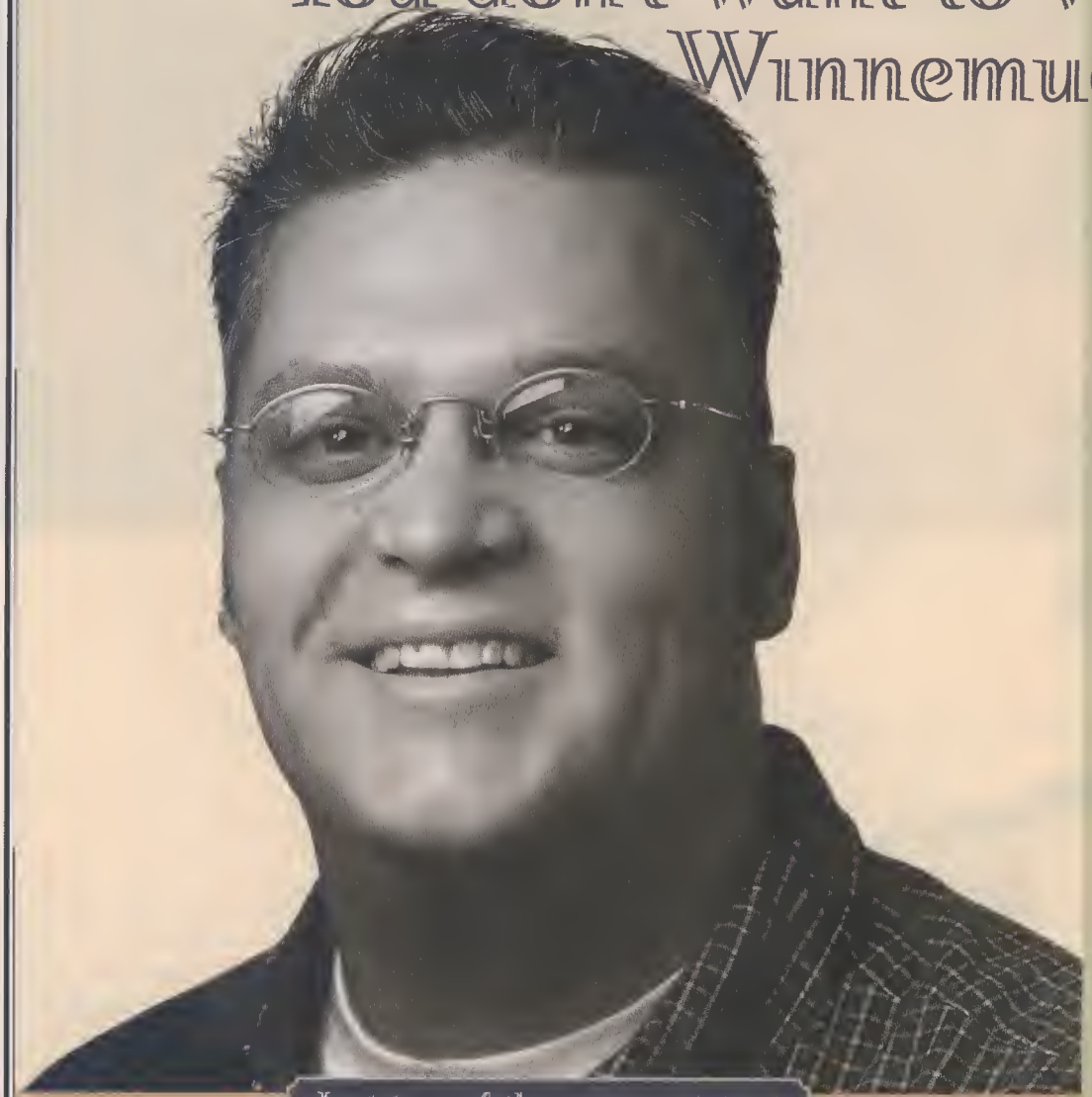
Now you can share the moment in the moment.

With the new Logitech® QuickCam™ Home, you can quickly record and send video mail to your brother in Milan. Let Grandma and Grandpa in on the fun with a live Internet video call when little Melissa pours the contents of her cereal bowl over her head. Or do the obvious and send pictures of yourself to all your friends. It's really quite amazing. And really very simple. Logitech QuickCam Home is a USB device that lets you put sharp, colorful stills and full-motion video with sound directly into your PC. It runs in Windows® 98 for a true plug-and-play experience. And, unlike other video cameras, it comes with a built-in microphone for natural, synchronized communication. All at a price that will surprise you. So see what you can do. And yes, let others see it, too. **www.logitech.com**

It's what you touch.™

the Logitech logo, and the Logitech ... referred to herein are either ... trademarks or the registered trademarks of Logitech

Your brother lives in Winnemucca. You don't want to visit Winnemucca.

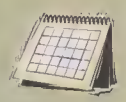


Just two of the reasons to get your family on MyFamily.com

You have family members spread out all over the place. But hey, this is the information age, people are connected, right? Well, do you feel connected? Connected to things that matter? Connected to people you care about? If not, it's time you did. Log on to www.MyFamily.com. In just a few minutes you can create a free, private, on-line gathering place for you and your entire family.

A place where those you choose can e-mail family members, chat in a secure room on even the most sensitive topics, customize family event calendars and photo albums, shop for gifts, and post news and announcements. You'll also find links to family-friendly sites and a filtered Web directory to deliver quality Internet content. So get your family on MyFamily.com, and stay connected.

MyFamily.com™



Customized family calender

Secure family chat

Family news & announcements

Family photo album

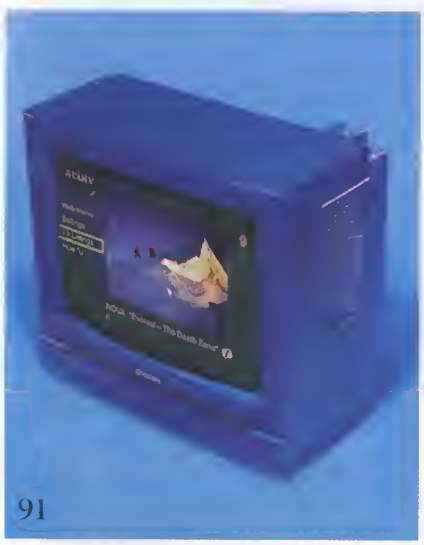
Free family e-mail

© 1998 Ancestry.com Inc. All rights reserved.

FamilyPC

FEATURES

JANUARY 1999 WWW.FAMILYPC.COM



ON THE COVER

42 Sharing a Computer with Your Kids
66 Computer Survival Guide: Keep Your PC Safe from Viruses, Kids, Crashes, More
91 That's Entertainment! Your TV-PC Options
52 Build a Family Web Site (And Why You'd Want To)
47 Can You Return PCs and CD-ROMs?

66 *Cover Story*

PC Perils

Your family PC is exposed to dozens of hazards. From viruses to power surges, conflicts to crashes, it seems trouble is never far away. Our annual Computer Survival Guide provides the perfect prescription to help prevent and recover from PC problems. Read on to learn about useful utilities, quick-fix tricks, and good maintenance habits you can adopt to keep your computer healthy. As an added bonus, we offer a year-long maintenance schedule.

52

Honey, I Digitized the Kids

A family Web page is a must for families that want to avoid huge bills at the photo processor yet still share frequent snapshots with geographically dispersed friends and relatives. Our day-by-day account of one dad's effort at building his family's "Home, Sweet Home Page" will help your family learn how easy it is to stake a claim on the Web. We also offer helpful hints from 114 family testers who rated seven Web-page-building programs.

91

We Interrupt This Program...

Devices like Sony's WebTV Plus, $99 TV Tuner cards, and digital TV boxes are hastening the collision of the TV and PC worlds. What will this do to the average American living room? We lay out all the options of getting your PC into the TV (and TV into your PC).

FAMILYPC REVIEWS

103 Hardware

Budget systems from Compaq, Packard Bell, and Hewlett-Packard; Comtrade 450; IBM Aptiva SE7; Gateway, IBM, and WinBook notebooks; Storm ImageStudio VF; 3-D graphics from Guillemot, STB, and Diamond; Matrox Marvel G200-TV.

119 Software

FamilyTested publishing software: Print Shop Deluxe, Microsoft Publisher, Print Artist, Print-Master, and more. Learn to Program BASIC; Sierra Club Perpetual Calendar; Adventures in Typing with Timon & Pumbaa.

133 GameTime

Cool winter games: NHL 99; Need For Speed III; Hoyle Card Games and Board Games; the Game of Life; Icarus; environmental sound; SimCity 3000 creator; and more.

COVER ILLUSTRATION: LOU BROOKS

DESKTOP-LIKE POWER FOR THE COUNTERTOP, TABLETOP AND SOFA TOP.

With its huge 15-inch display, Pentium® II processor at 300MHz and the great 3D graphics of its 8MB 2X AGP video card, the Dell® Inspiron™ 7000 D300LT is almost like working on a powerful desktop.

Except its power moves around your home. Where you can build your own website or surf the Internet in the basement. Balance your checkbook while watching football. And catch up on e-mail in bed. Visit our website or call toll-free to buy.

DELL® INSPIRON™ 7000 D300LT
PENTIUM® II PROCESSOR AT 300MHz

All-in-One Multimedia Performance

- 15" XGA Active Matrix Display
- 64MB SDRAM
- 4GB Ultra ATA Hard Drive
- Removable Combo 24X Max[AA] Variable CD-ROM and 3.5" Floppy Drive
- 2X AGP 8MB ATI Rage Pro 3D Video
- 3D Surround Sound and Hardware Wavetable
- Intelligent Lithium Ion Battery
- Internal 56K Capable[π] Data/Fax Modem
- MS® Home Essentials 98 with Money 98
- MS Windows® 98
- Touchpad
- 3-Year Limited Warranty[†]

★ *Upgrade to a 6.4GB Ultra ATA Hard Drive, add $149.*

$2999

Personal Lease[°]: $112/Mo., 36 Mos.[#]
Order Code #801212

TO ORDER TOLL-FREE Keycode #88528

800-247-2304

M-F 7a-11p • Sa-Su 8a-8p CT
In Canada,* call 800-839-0148
In Mexico,* call 001-800-210-7607

BUILD YOUR OWN AND ORDER ONLINE

BE DIRECT™ DELL®

www.dell.com/direct

intel inside
pentium® II PROCESSOR

For faster service, please have your order code and keycode available when calling.

°Personal leasing arranged by Dell Financial Services L.P., an independent entity, to qualified customers. Amount of monthly lease payments above based on 36-month lease. All above monthly lease payments exclude taxes which may vary (for example, Hartford City, IN sales tax #$5.60/month). Shipping cost due with first payment. No security deposit required; subject to credit approval and availability. Lease terms subject to change without notice.

NEED A LAST-MINUTE GIFT? GO TO OUR WEBSITE AND BUILD ONE.

www.dell.com/direct

The best gifts are the ones you build yourself. So visit Dell's online store, where you can custom configure the exact computer you want to give. Or choose from Dell's lineup of some of the fastest, most powerful, most up-to-the-minute desktops and notebooks available. Once you build it, you're done; not only will it be delivered promptly, Dell's award-winning service and support will take care of any technical problem 24 hours a day online or by phone. Visit us at www.dell.com/direct. And put together a remarkable computer for friends, family or (huzzah!) yourself.

DELL® DIMENSION® DESKTOPS

Common features: ◆ Mini-Tower Model ◆ 512K8 Integrated L2 Cache (128KB on Intel® C Service ◆ 3.5" Floppy Oisk Orive ◆ 2 Universal Serial 8us (USB) Ports ◆ McAfee VirusScar

DELL DIMENSION V333c
INTEL CELERON PROCESSOR AT 333MHz

- 64MB SDRAM
- 8.4GB Ultra ATA Hard Orive
- 15" (13.7" viewable) 800F Monitor
- ATI 8M8 3D AGP Graphics
- 40X Max≈ Variable CO-ROM Orive
- Yamaha XG 64V Wavetable Sound
- harman/kardon HK-195 Speakers
- MS Works Suite 99 with Money 99 Basic
- Oell OuietKey® Keyboard
- Logitech First Mouse+ Wheel (PS/2v)

★ *Upgrade to a NEW 4.8X DVD-ROM Drive, add $59.*
★ *Upgrade to 128MB SDRAM, add $149.*
★ *Upgrade to a 17" (15.9" viewable) 1000LS Monitor, add $69.*

$1299

Personal Lease°: $50/Mo., 36 Mos.§
Order Code #501206

NEW DELL DIMENSION V400
PENTIUM® II PROCESSOR AT 400MHz

- 64MB 100MHz SORAM
- 8.4GB Ultra ATA Hard Orive
- 17" (15.9" viewable) 1000LS Monitor
- ATI 8MB 3O AGP Graphics
- 4.8X OVO-ROM Orive
- Yamaha XG 64V Wavetable Sound
- harman/kardon HK-195 Speakers
- MS Works Suite 99 with Money 99 Basic
- Oell OuietKey Keyboard
- Logitech First Mouse+ Wheel (PS/2v)

★ *Upgrade to a 17" (16.0" viewable, .26dp) Trinitron® 1000HS Monitor, add $99.*
★ *Upgrade to a NEW 12.9GB Ultra ATA Hard Drive, add $89.*
★ *Upgrade to 128MB SDRAM, add $149.*

$1699

Personal Lease°: $64/Mo., Mos.
Order Code #501205

DELL INSPIRON™ NOTEBOOKS

Common features for Inspiron 3500: ◆ 3O Surround Sound and Software Wave ◆ MS Windows 98 ◆ Touchpad ◆ 3-Year Limited Warranty† **Common features for Insp** Battery ◆ MS Windows 98 ◆ Touchpad ◆ 3-Year Limited Warranty†

NEW DELL INSPIRON 3500 D233XT
PENTIUM II PROCESSOR AT 233MHz

- 13.3" XGA Active Matrix Oisplay
- 32MB SDRAM
- 3.2GB Ultra ATA Hard Orive
- Modular 24X Max^^ Variable CO-ROM
- Modular 3.5" Floppy Orive
- Deluxe Nylon Case
- MS Home Essentials 98 with Money 98

★ *Internal 56K Capable$^{\pi}$ Data/Fax Modem with 30-Day Trial Offer ConnectDirect Internet Service, add $99.*
★ *Upgrade to 3-Year Premier On-site$^{\Delta}$ Service, add $149.*
★ *Upgrade to 64MB SDRAM, add $99.*

$1999

Personal Lease°: $75/Mo., 36 Mos.
Order Code 801215

DELL INSPIRON 7000 D266GT
PENTIUM II PROCESSOR AT 266MHz

- 14.1" XGA Active Matrix Oisplay
- 64MB SORAM
- 4GB Ultra ATA Hard Orive
- Removable Combo 24X Max^^ Variable CO-ROM and 3.5" Floppy Orive
- 2X AGP 4MB ATI Rage Pro 3O Video
- Internal 56K Capable$^{\pi}$ Oata/Fax Modem
- 30-Oay Trial Offer ConnectOirect Internet Service
- MS Home Essentials 98 with Money 98

★ *Upgrade to a 6.4GB Ultra ATA Hard Drive, add $149.*
★ *Upgrade to a Removable Combo 2X DVO-ROM and Floppy Orive, add $199.*
★ *Second Intelligent Lithium Ion Battery, add $129.*

$2499

Personal Lease°: $94/Mo., 36 Mos.
Order Code #501211

intel inside
pentium® II PROCESSOR

Pricing not discountable. ★Prices and specifications valid in U.S. only and subject to change without notice. †For a complete copy of Guarantees or Limited Warranties, write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. **Requires Windows 98. ^At-home or On-Site service provided via service contract between customer and third-party provider, and is not available in certain remote areas. Technician dispatched if necessary pursuant to phone-based troubleshooting with technical support personnel. ††*PC Magazine* 5/98. ≈40X Max/17X Min. ^^24X Max/10X Min. $^{\pi}$Download speeds limited to 53Kbps. Upload speeds are less (in the 30Kbps range) and vary by modem manufacturer. Speeds also vary depending on line conditions. Analog phone line and compatible server equipment required. ‡Limit one per household. Not valid with other Hewlett Packard offers unless otherwise specified by that offer. Offer is limited to qualifying HP DeskJet, ScanJet and All-in-One products. Customer must mail completed rebate coupon and copy of receipt(s) dated 10/20/98 to 1/30/99 for all products. Customer will need serial number bar codes from each purchased product. Submissions must be postmarked no later than 1/30/99 and received no later than 2/15/99. Customer will receive a $50 rebate check, payable in U.S. dollars, from Hewlett Packard approximately 8-10 weeks after receipt of rebate materials. See rebate coupon for details. Intel, the Intel Inside logo and Pentium are registered trademarks and Celeron is a trademark of Intel Corporation. MS, Microsoft, IntelliMouse and Windows are registered trademarks of Microsoft Corporation. 3Com is a registered trademark of 3Com Corporation. HP and DeskJet are registered trademarks of Hewlett Packard Corporation. Trinitron is a registered trademark of Sony Corporation. ©1998 Dell Computer Corporation. All rights reserved.

§Personal leasing arranged by Dell Financia Services L.P., an independent entity, to qualifie customers. Amount of monthly lease payment above based on 36-month lease. All abov monthly lease payments exclude taxes whic may vary (for example, Hartford City, IN sale tax @$2.50/month). Shipping cost due with firs payment. No security deposit required subject to credit approval and availabilit Lease terms subject to change without notice

FA

eleron™ Processor-based Systems) ◆ *NEW* 3Com® USR V.90π PCI Telephony WinModem ◆ 30-Day Trial Offer ConnectDirect℠ Internet ◆ MS® Windows® 98 ◆ 3-Year Limited Warranty† ◆ 1-Year At-home^Δ Service **Upgrade:** ◆ 3-Year Premier At-home^Δ Service, add $99

DELL DIMENSION XPS R450 PENTIUM II PROCESSOR AT 450MHz

- 128MB 100MHz SDRAM
- *NEW* 12.9GB Ultra ATA Hard Drive
- 17" (15.9" viewable) 1000LS Monitor
- 8MB ATI XPERT 98D 3D AGP Graphics Card
- 4.8X DVD-ROM Drive
- Turtle Beach Montego A3D 64V Sound Card
- harman/kardon HK-195 Speakers
- MS Works Suite 99 with Money 99 Basic
- Dell QuietKey Keyboard
- MS IntelliMouse®

★ *Iomega Zip 100MB Internal Drive with Two Cartridges, add $99.*

★ *Upgrade to a 17" (16.0" viewable, .26dp) Trinitron 1000HS Monitor, add $99.*

$1999

Personal Lease°: $75/Mo., 36 Mos.
Order Code #501204

DELL DIMENSION XPS R450 PENTIUM II PROCESSOR AT 450MHz

- 128MB 100MHz SDRAM
- *NEW* 17.2GB Ultra ATA Hard Drive
- 17" (16.0" viewable, .26dp) Trinitron 1000HS Monitor
- 8MB ATI XPERT 98D 3D AGP Graphics Card
- 4.8X DVD-ROM Drive
- Turtle Beach Montego A3D 64V Sound Card
- ACS-295 Speakers with Subwoofer
- Iomega Zip 100MB Internal Drive
- MS Office 97 Small Business Edition v2.0 plus Encarta Encyclopedia 98
- Dell Comfort Key Keyboard
- MS IntelliMouse

★ *Upgrade to a 19" (17.9" viewable, .26dp) 1200HS Monitor, add $99.*

$2499

Personal Lease°: $94/Mo., 36 Mos.
Order Code #501207

DELL DIMENSION XPS R450 PENTIUM II PROCESSOR AT 450MHz

- 128MB 100MHz SDRAM
- *NEW* 17.2GB Ultra ATA Hard Drive
- *NEW* 19" (18.0" viewable, .26dp) Trinitron P990 Monitor
- *NEW* 16MB STB nVidia TNT 3D AGP Graphics Card
- 4.8X DVD-ROM Drive and Decoder Card
- Turtle Beach Montego A3D 64V Sound Card
- ACS-495 Dolby Surround Sound Speakers with Subwoofer
- Iomega Zip 100MB Internal Drive
- MS Works Suite 99 with Money 99 Basic
- Dell Comfort Key Keyboard
- MS IntelliMouse

$2799

Personal Lease°: $106/Mo., 36 Mos.
Order Code #501202

PRE-LOADED SOFTWARE

Microsoft® Office 97 Small Business Edition v2.0:

Word 97, Excel 97, Publisher 98, Outlook 98, Small Business Financial Mgr. 98 and Expedia Streets 98.

Microsoft Works Suite 99:
(Dimension only)
Word 97, Encarta Standard 99, Money 99 Basic, Works 4.5a, Works Calendar, Graphic Studio Greetings and Expedia Streets 98.

DIMENSION SOFTWARE BUNDLES

NEW

Fast Track Game Pack $79:
Tomb Raider 2, Jack Nicklaus Golf 5.0, Titanic: Adventure Out of Time, Hardball 6.0 and Total Annihilation.

Quicken 99 Power Bundle $79:
Quicken Deluxe 99, Quicken Financial Planner, Quicken Family Lawyer and a coupon for Quicken Turbo Tax 99.

able ◆ NeoMagic MediaMagic 256AV AGP Video ◆ Intelligent Lithium Ion Battery
iron 7000. ◆ 3D Surround Sound and Hardware Wavetable ◆ Intelligent Lithium Ion

DELL INSPIRON 7000 D300LT PENTIUM II PROCESSOR AT 300MHz

- 15" XGA Active Matrix Display
- 64MB SDRAM
- 4GB Ultra ATA Hard Drive
- Removable Combo 24X Max^^ Variable CD-ROM and 3.5" Floppy Drive
- 2X AGP 8MB ATI Rage Pro 3D Video
- Internal 56K Capable™ Data/Fax Modem
- 30-Day Trial Offer ConnectDirect Internet Service
- MS Home Essentials 98 with Money 98

★ *Inspiron 7000 Port Replicator, add $149.*

★ *Modular Iomega Zip 100MB Internal Drive, add $149.*

★ *Upgrade to a 6.4GB Ultra ATA Hard Drive, add $149.*

$2999

Personal Lease°: $112/Mo., 36 Mos.
Order Code #801212

DELL INSPIRON 7000 D300LT PENTIUM II PROCESSOR AT 300MHz

- 15" XGA Active Matrix Display
- 64MB SDRAM
- 6.4GB Ultra ATA Hard Drive
- Removable Combo 2X DVD-ROM Drive and 3.5" Floppy Drive
- 2X AGP 8MB ATI Rage Pro 3D Video
- Internal 56K Capable™ Data/Fax Modem
- 30-Day Trial Offer ConnectDirect Internet Service
- MS Office 97 Small Business Edition v2.0

★ *Upgrade to 128MB SDRAM, add $199.*

★ *Modular Iomega Zip 100MB Internal Drive, add $149.*

$3399

Personal Lease°: $127/Mo., 36 Mos.
Order Code #801213

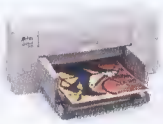
THE GIFT BOX

$50 MAIL-IN REBATE WHEN YOU BUY CERTAIN DELL DIMENSION DESKTOPS INCLUDING MONITOR AND SELECTED HP® PRODUCTS. OFFER ENDS 1/30/99.‡

PRINTER

HP DESKJET® 722C

- Photo-quality printing on any paper
- *PC Magazine's*†† "Editors' Choice"
- Up to 8 ppm black, 4 ppm color
- Add a printer cable for $25.

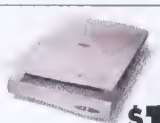


$249
$299–$50 MAIL-IN REBATE‡

SCANNER

***NEW* HP SCANJET 4100Cse**

- Uses HP's Exclusive Intelligent Scanning Technology
- USB** connectivity for easy installation
- 600 dpi, 1200 dpi enhanced, 36-bit color



$149
$199–$50 MAIL-IN REBATE‡

POWER STRIP

APC SURGESTATION PRO8T2

- Helps protect your system against electrical surges
- 8 outlets with block spacing for 3 outlets
- Provides $10K equipment protection warranty

$39

For faster service, please have your order code and keycode available when calling.

ORDER ONLINE 24 HOURS A DAY

ACCESS SPECIAL PROMOTIONS
DESIGN YOUR IDEAL COMPUTER
CHECK THE STATUS OF YOUR ORDER
ACCESS 24HR. ONLINE TECH SUPPORT

TO ORDER TOLL-FREE Keycode #88530

800-247-2304

M-F 7a-9p • Sa-Su 8a-8p CT
In Canada,* call 800-839-0148
In Mexico,* call 001-800-210-7607

BUILD YOUR OWN AND ORDER ONLINE

BE DIRECT™ DELL®

www.dell.com/direct

JINGLE BELLS AND WHISTLES.

SERIOUS JINGLE BELLS AND WHISTLES.

Whether you've been naughty or nice this year, Dell's got a multimedia system for you. Just upgrade our Dell® Dimension® XPS R400 to immerse yourself in a world of blazing graphics and explosive sound. The upgrade's Trinitron monitor, 16MB graphics card, high-end sound card and surround sound speakers are designed especially for the rich graphics and tones of cutting-edge 3D games and multimedia websites. Visit www.dell.com/direct or give us a call for the ultimate gift to your eyeballs and eardrums.

DELL® DIMENSION® XPS R400
PENTIUM® II PROCESSOR AT 400MHz

- 128M8 100MHz SDRAM
- *NEW* 12.9 G8 Ultra ATA Hard Drive
- 17" (16.0" viewable, .26dp) Trinitron® 1000HS Monitor
- *NEW* 8M8 ST8 nVidia 3D AGP Graphics Card
- 4.8X DVD-ROM Drive and Decoder Card
- Turtle 8each Montego A3D 64V Sound Card
- harman/kardon HK-195 Speakers
- *NEW* 3Com® USR V.90™ PCI WinModem
- 30-Day Trial Dffer ConnectDirect℠ Internet Access
- Iomega Zip 100M8 Internal Drive
- MS® Works Suite 99 with Money 99 8asic; McAfee VirusScan
- MS Windows® 98/ IntelliMouse®
- Dell Comfort Key Keyboard
- 3-Year Limited Warranty†
- 1-Year At-home^Δ Service

$2199

Personal Lease°: $83/Mo., 36 Mos.ª
Order Code #501210

SERIOUS JINGLE BELLS AND WHISTLES UPGRADE

- ★ *NEW 19" (18.0" viewable, .26dp) Trinitron P990 Monitor*
- ★ *NEW 16MB STB nVidia TNT 3D AGP Graphics Card*
- ★ *NEW Turtle Beach Montego II A3D 320V Sound Card*
- ★ *Altec Lansing ACS-495 Dolby Surround Sound Speakers with Subwoofer*

ADD $275
Order Code #501215

TO ORDER TOLL-FREE Keycode #88529

800-247-2304

M-F 7a-11p • Sa-Su 8a-8p CT
In Canada,* call 800-839-0148
In Mexico,* call 001-800-210-7607

BUILD YOUR OWN AND ORDER ONLINE

BE DIRECT™ DELL®

www.dell.com/direct

intel inside
pentium® II

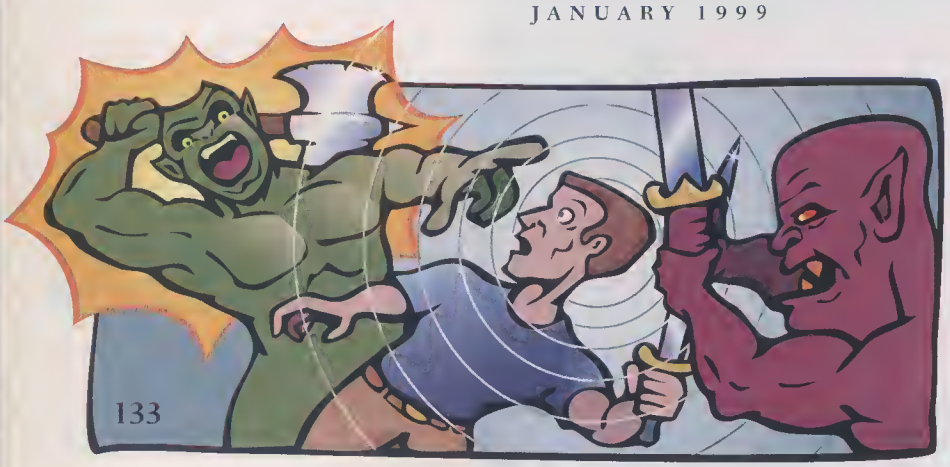
For faster service, please have your order code and keycode available when calling.

°Personal leasing arranged by Dell Financial Services L.P., an independent entity, to qualified customers. Amount of monthly lease payments above based on 36-month lease. All above monthly lease payments exclude taxes which may vary (for example, Hartford City, IN sales tax ª$4.14/month). Shipping cost due with first payment. No security deposit required; subject to credit approval and availability. Lease terms subject to change without notice.

FamilyPC

DEPARTMENTS

JANUARY 1999 WWW.FAMILYPC.COM



179 WEB SITINGS

We declare Discovery Channel Online the first *FamilyPC* Site of the Month, and review homework help, mortgage/home loan, and DVD/video sites. Plus, our inaugural event guide (to Super Bowl XXXIII), 5-Minute Internet Activities, and the January Web Almanac.

UP FRONT

16 Ed Note
Help!

19 Double Click
Making the Move to DVD
Robin decides to deal with DVD.

25 Hotline
Reader Feedback
Programming tools for kids; a call for preschool grants; online directions disputed.

29 Keeping Pace
Beat the Winter Blahs; Q&A with Holly Holmberg Brooks; new and improved software; Mickey mousepads; search for intelligent sites; more.
- **Creativity** — Fantastic Fonts
- **Health** — Home Ergonomics 101
- **Money** — New Year's Finance Tips

42 Parental Guidance
Learning to Share
Who gets to use the PC when?

47 Savvy Consumer
Many Happy Returns?
Can you get your money back?

153 HELP AND ADVICE

Nonaudible audio CD fix; Utility Watch; Undo-it review; What's That Do?: The Reset Button; Windows 95/98 tips.

163 Hands On
- Make Personalized Sports Cards
- Uninstall Software the Right Way

167 SchoolPC
A Guide to Computers in the Classroom
PC training resources for teachers; new school software; Class Act: environmental science specialist profile; Special Feature: the one-computer classroom; Try This!: computer claymation in the classroom.

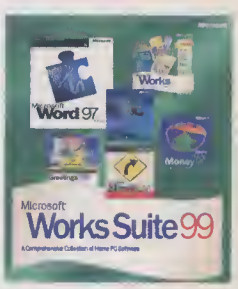
FAMILYPC ONLINE

You can get to *FamilyPC*'s FamilyTested reviews, Hands On help, and more anytime by surfing to ***www.familypc.com***, our home at ***ZDNet***. If you're shopping for products we've reviewed, we've got a convenient solution: Just click on ***Edutainment Catalog***, ***Cyberian Outpost***, or ***computershopper.com*** in our reviews to access searchable, secure online stores. And stay up-to-date with *FamilyPC*'s newletter: Send e-mail to familypc-on@zdnet.zdlists.com.

Microsoft
Where do you want to go today?®

We can help with the everyday, computer-type stuff,
but certain things, we'll leave up to you.

With Microsoft® Works Suite 99, you get all the essential ingredients you need to get things done around the house. Manage your household finances, write letters, and create fancy cards and invitations. It can even help your kids research and write school reports. Do all these things and more for the price of a few new cookie sheets and some oven cleaner. So go ahead, start getting things done, but remember: while we can remind you what to get at the grocery store, it's better that you handle the actual baking.



With Works Suite 99 you get all six of these great Microsoft products for around $100*:

• Word 97 • Works 4.5 • Encarta® Encyclopedia 99 • Money 99 Basic • Graphics Studio Greetings 99 • Expedia™ Streets 98

Learn more at www.microsoft.com/works

*Reseller prices may vary. ©1998 Microsoft Corporation. All rights reserved. Microsoft, Encarta, and *Where do you want to go today?* are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Hallmark Connections is a trademark of Hallmark Licensing, Inc. Other products and companies mentioned herein may be the trademarks of their respective owners.

FamilyPC

Editor in Chief and Publisher Robin Raskin

EDITORIAL

Editor Joe Panepinto
Managing Editor Judy Fogg
Senior Editors Kurt Carlson, Robert M. Ryan
Assistant Managing Editor Margaret A. Richard
Senior Associate Editor Valle Dwight
Web Producer Eric C. Griffith
Associate Editors Michelle Megna, Lauren Simonds
Copy Editor Jeff Edmonds
Research Editor Julia Lynch
Editorial Associate Mandana Marsh Szkotak
Editorial Assistant Jean Graham, Moira Hinderer
Contributing Editors Steve Apiki, Philip Bishop, Eric Brewer, Judy McKinley Brewer, Bob Domine, Bonny L. Georgia, Gregg Keizer, Jon Pepper, Alfred Poor
Technical Consultant Jo-Ann Hirschel
Family Tester Coordinators Fred Abaroa, Heather Keegan

ART AND DESIGN

Art Director Mike Grinley
Associate Art Director Amy M. Ketchum
Designers Nina Dudley, Philip Price

BUSINESS

Group Business Manager Cynthia Mason

PRODUCTION

Advertising Production Manager Nicole Folkes
Advertising Production Coordinator Araba M. Simpson
Editorial Production Coordinator Dana Stiepock

ADVERTISING

National Associate Publisher Todd Anderman
West Coast Ad Director Carrie Kelly
Regional Ad Manager, East Coast & New England Bill Herbst
Regional Ad Manager, Detroit Ken Stubblefield
District Sales Manager, New England Leslie Eddy
District Sales Manager, West Central Diana Pouliot
District Sales Manager, Northwest Aimee Montague
District Sales Manager, Bay Area Donald Reilley
Account Executive, Northwest & Southwest Rikka Seibert
Account Executive, Bay Area & West Central Annie Van Buren
Account Executive, East Coast & New England Rob Wilk
Sales & Marketing Coordinator Tara Bernstein
National Advertising Coordinator Lauren Ralph
Marketplace Sales Manager Marie Isabelle
Sales Assistant Christine Riling

MARKETING

Director of Marketing & Communications Joe Calk
Manager of Sales Development William Speck
Communications Coordinator Janine Clermont

Ziff Davis Consumer Media Group
Executive VP, Group Publisher Chris Dobbrow
Executive Director Marketing and Research Randy Cohen
FamilyPC *Founder* Jake Winebaum

Editorial Correspondence: 244 Main Street, Northampton, MA 01060-0929, or online at FPCletters@zdnetmail.com. FamilyPC *cannot be held responsible for any unsolicited materials. Subscription Correspondence: Contact* FamilyPC, *P.O. Box 55414, Boulder, CO 80322-5414; 303-665-8930 (U.S. only); 303-604-7445 (outside the U.S.); www.zdnet.com/zdsubs /familypc/service. Subscription Rates: The 1-year (12 issues) subscription rate is $14.95 in the U.S. and $30.95 outside the U.S. Checks must be made payable, in U.S. currency only, to* FamilyPC. *Please allow six to eight weeks for your first issue to arrive, as well as for any changes to take place on existing subscriptions. Please include your subscription label when writing to us; it contains information about your subscription that will help us. Back Issues (subject to availability): $8 per issue ($10 outside the U.S.), prepayment necessary. Checks must be made payable, in U.S. currency only, to* FamilyPC. *Mail requests to Back Issues, Ziff-Davis Inc., P.O. Box 53131, Boulder, CO 80322-3131.* *Copyright © 1998 ZD Inc. All rights reserved. Reproduction in whole or part without permission is prohibited. Printed in the U.S.A.*

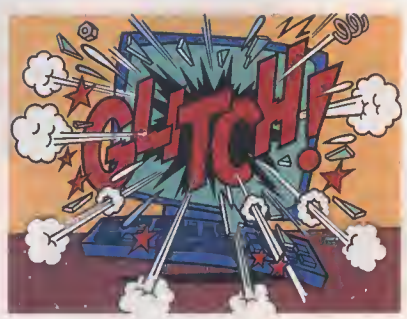
Editor's Note

Help!

If this issue had a theme song, it would be "Help," by the Beatles. Of course, when you're looking for a helping hand with some system snafu or maintenance mishap, you hope someone or something shows up to dispense much stronger and more effective computing advice than the Fab Four ever could. So if you're feeling not so self-assured about what to do when your system is acting up or your kids are acting up around it, check out our annual Computer Survival Guide.

When I was younger (so much younger than today), we put out our first of what was to be an annual guide to glitches and the maintenance and prevention routines you need to know to keep them to a minimum. Four years later, we've nailed down the most common "PC Perils" — crashes, viruses, conflicts, file glut, kids, and environmental factors — and we offer suggestions on the utilities and practices that are sure to keep your system safe and running smoothly.

Of course, even when your system is running like clockwork, there's always the question of what to do with it. In "Honey, I Digitized the Kids," we catalog one dad's four-day effort to create a home, home on the Web for his family. The trials and tribulations of this cyber-age pioneer are sure to keep you enthralled (as will the FamilyTested reviews of Web page building software).



In our final feature, we outline what the world of electronic entertainment and information will look like after PCs and TVs collide in your living room. The story — "We Interrupt This Program…" — is all about TV-PC convergence, from WebTV to TV tuner cards, from digital to high-definition TV. In short, we offer a glimpse of what actually happens when these two worlds merge and make an impact on your family's entertainment time.

Finally, be sure to read our new Keeping Pace pages on Money, Creativity, and Health. These new lifestyle pages recognize that the PC, CD-ROMs, and Web sites affect every aspect of our daily lives — how we communicate with family and friends, and how we manage our family finances, daily chores, health, work, and more. Unlike other magazines that discuss computing, we put the technologies in the context of your hectic, time-strapped family life. And to show that we do appreciate your being 'round to read all about it, we promise to bring you a different mix of lifestyle pages every month so you can better understand how your family PC can help.

Joe Panepinto

Editor

A Tale Of Two JumpStarts.

1. DRIVE TO COMPUTER WAREHOUSE STORE.
2. WANDER AIMLESSLY THROUGH AISLES.
3. ASK NERDY SALESPERSON FOR HELP.
4. NOD AND PRETEND YOU UNDERSTAND.
5. UNTANGLE ONE CHILD FROM $4,500 NETWORKING EQUIPMENT.
6. CONVINCE OTHER CHILD TO PUT DOWN HIGH-END LAPTOP.
7. SEARCH THROUGH BINS OF SOFTWARE.
8. KEEP SEARCHING.
9. FINALLY UNEARTH JUMPSTART PROGRAM.
10. WAIT IN LONG CHECK-OUT LINE.
11. GET STUCK IN TRAFFIC ON THE WAY HOME.
12. REALIZE YOU LEFT YOUR WALLET AT CHECK-OUT STAND.

1. TURN ON COMPUTER.
2. GO TO WWW.eTOYS.COM
3. BROWSE "AWARD-WINNERS" IN SOFTWARE DEPARTMENT.
4. SOFTWARE IS DELIVERED TO YOUR DOORSTEP.

Let's face it. Buying children's software can be confusing. But now there's eToys.com, the online toy store where all the best known programs are just a simple click away. Award-winning titles and more you won't find at those so-called superstores. eToys.com carries thousands of children's toys, software programs, books, video games and more all at guaranteed low prices. And with secure worry-free shopping.

eToys® .com

We Bring The Toy Store To You.℠

www.eToys.com **AOL Keyword: eToys**

© 1998 eToys Inc. All trademarks are owned by their respective companies.

dance studio

mix grooves bust moves!

Turn your Keyboard into a dance floor.

With MetaCreations' new Dance Studio™ your computer can hip-hop, groove to a psychedelic sound, rave all night, boogie to the disco beat, bang heads—even two-step. Hit a key and make 3D characters bust moves. Use your favorite CD or our own pre-loaded jams. You can even remix them using the included Mixman SE software.

MetaCreations

To order, please call **800.846.0111** dept. 802 or visit us on the web at **www.metacreations.com**

©1998 MetaCreations Corp. All rights reserved. Dance Studio and MetaCreations are trademarks of MetaCreations Corp.

BY ROBIN RASKIN

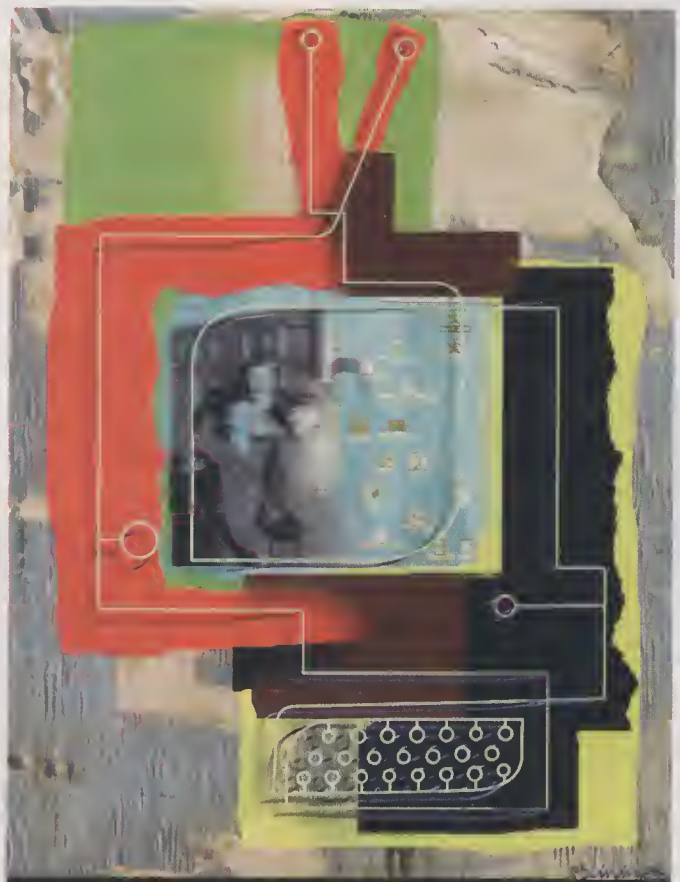
Making the Move to DVD

As the DVD revolution rolls into American living rooms, it brings together parents, kids, the PC, and the TV

AFTER MORE THAN two years of buzz about the coming of DVD, it has arrived. How do I know DVD — the much-touted replacement for CD-ROMs and possibly VHS tapes — is finally here? A recent trip to my local, not especially progressive, Blockbuster Video store revealed that it now has an entire section for DVD movies. Though it was by far the least-trafficked corner of the store, I took it as a sign that I ought to get with the program.

Of course, I could have gone out, as many sane people will, and bought a stand-alone DVD movie player that simply hooked up to my TV so I could view DVD movies (*simply* being the operative word here); companies like Philips are selling them for about $400. But for me, if it's high-tech, it has to involve my PC. Plus, I wanted to be able to watch DVD movies on my PC and play DVD games in full 3-D glory (which includes 3-D environmental sound).

So my overly ambitious plan was to meld my PC with my TV into the ultimate DVD home entertainment system. To get started, I picked up the Creative Labs PC-DVD Encore Dxr2 upgrade kit ($229.99) to install in my PC, and the Cambridge SoundWorks PCWorks FourPoint Surround speaker set ($99.99), which consists of four 3-inch satellite speakers and a 5-inch subwoofer. To add more realism to DVD games that we might play on our PC, I also decided to add 3-D environmental sound by installing a Creative Labs Sound Blaster Live card ($199). A full day later, I emerged, only slightly scathed, with a killer home theater system in a living room that had begun to look more like a window display at Circuit City than a cozy refuge from the high-tech world.



DVD-ROM sales increased from 646,000 in 1997 to 8.2 million in 1998, according to International Data Corp.

ILLUSTRATION: OTTO STEININGER

The Road to Spaghetti City

Of course, the first step is to bring your PC into the same room as your TV, so you can output the DVD images from your PC to your TV monitor. While I'm no Martha Stewart, even I noticed what a home decor disaster it was to stand my beige Gateway near my jet-black TV and stereo components. (In fact, the only aesthetic improvement that came of the marriage was that it forced me to revisit the dustballs under our existing home entertainment system.)

With the PC in place, it was time to do the upgrade. The PC-DVD Encore has two parts — a decoder board that lets you play back the video, and a DVD drive that looks like a standard CD-ROM drive. I'd love to say installing it was a smooth operation, but I encountered all the usual problems you run into when you install boards and drives, plus a few I hadn't expected. I won't bore you with the details — suffice it to say, both my living room (four speakers drag

with them a lot of wire) and the inside of my PC went from being merely cluttered to being Spaghetti City. There were computer and speaker cables and connectors everywhere.

Naturally, when I finally got things installed and cabled properly, nothing worked. It turns out that I had interrupt conflicts — too many peripheral devices on one PC. So I disabled my PC's modem. Frankly, were it not for my talented husband, who makes his living as a computer engineer, I probably would have stopped after looking at page 1 of the PC-DVD Encore's manual — the page that lists all the wires and connectors.

DVD offers a richness that CD-ROMs can't, especially when you combine DVD with 3-D environmental sound.

The moral of the story here is simple. If you want to experience DVD, don't be as PC-centric and ambitious as I was. (Or make sure you marry or live near a computer engineer.)

The Final Destination

Once everything was working properly, my family could watch a DVD movie or play a DVD game on our PC or television screen. It was simple to see, hear, and experience the difference DVD makes. What's different about a DVD movie? Well, for one thing, the picture looks great. On your computer screen the picture is especially good, but DVD even makes the images on your low-resolution TV screen look better than normal.

DVD movies don't just look good; they also offer special features. Since a DVD disc holds up to 28 times the data of a single CD-ROM, it can store lots of information. For example, we could run most of the DVD movies we rented in one of several foreign languages as well as in English, which made me really believe the kids might use these as a tool to garner a bit more foreign language fluency. The discs also included some outakes — the equivalent of digital liner notes. In addition, Creative Labs offers an on-screen "remote control" software interface that lets you freeze a frame without sacrificing any clarity, fast-forward to a scene, and put bookmarks in your favorite places.

As for computer games, DVD offers a richness of play that CD-ROMs can't, especially when you combine DVD with 3-D environmental sound. We played Wings, a DVD game with a killer opening video sequence followed by game play that was more realistic than anything we'd seen before. The detailing, the effects (such as smoke), the 3-D sound, all combined to make us feel totally immersed in the game. (On the downside, the environmental sound was so real that our normally calm dog went ballistic.)

The kids? They agreed that they liked watching DVD movies on the TV screen, but they found watching a DVD movie on the PC "kind of lame." They thought playing computer games on the TV screen was way cool, and said DVD games with environmental sound felt different. My husband (the audiophile) thought looking at DVD movies on our large-screen TV was great but the PC sound system was far inferior to his stereo system. Me, I just thought it was fun to bring the PC into the living room and build a home theater — something only the true enthusiast could understand. I also found that it has finally brought us all together — my husband, my kids, my TV, and my PC.

Robin Raskin *is editor in chief and publisher of* FamilyPC. *E-mail her at robin_raskin@zd.com.*

Where to Get DVDs

You can shop at your local Blockbuster Video for DVD movies and games, or see our Web Sitings in this issue for reviews of online outlets such as Reel.com, DVD Express, and NetFlix.com.

Is your child safe online?

Net Nanny® is the only software that offers you peace of mind and the option to manitar email, chat programs, personal messaging services, Web sites, News groups, and affline applications.

- Customize the content of our lists
- Control any desktop or Internet application
- Free list updates twice monthly

Award-winning Net Nanny® Internet and PC filtering software, allows you to take the right steps.

Net Nanny®

Educating • Protecting • Empowering

For the leader in PC filtering,

Call 1-800-340-7177

to order today!

Or for more information

visit us on the Web at

http://www.netnanny.com

Also available at:

Best Buy
CompUSA
Computer City
Computer Discount Warehouse
Electronic Boutique
Fry's Electronic Comp
PC Connection
Soft Choice
Software House International

© 1998 All Rights Reserved. Net Nanny is a registered trademark of Net Nanny Software International.

aspire

Welcome to All-In-Wonder Land

ATI ALL-IN-WONDER PRO

The ultimate upgrade card for maximum family fun

ALL-IN-WONDER PRO

- Just one card inserted in one slot does it all - 8MB of memory, incredible 3D action, "intelligent" TV on your PC, DVD video playback, still and motion video capture, TV-set display, rich and fast 2D graphics - and more
- Digital VCR with video compression that lets you save your favorite TV or video on your PC
- Enable Web TV for Windows 98 and experience interactive on-line TV on your PC
- The only all-in-one, complete PC upgrade solution is ATI All-IN-WONDER PRO
- Check out our site at www.atitech.com/ad/wonder to see cool ways to use your All-IN-WONDER PRO
- Includes a valuable software bundle featuring MGI VideoWave video editing software and cool 3D games

PC GAMER EDITORS CHOICE · CE CHOICE · PC MAGAZINE Best of 1997 · PC MAGAZINE EDITORS' CHOICE · MVP PCcomputing · MVP PCcomputing · EDN INNOVATION '97 WINNER

The New Breed of Speed.

http://www.atitech.com/ad/fampc

© Copyright 1998, ATI Technologies Inc. ATI and ALL-IN-WONDER PRO are trademarks and/or registered trademarks of ATI Technologies Inc. All other company and/or product names are trademarks and/or registered trademarks of their respective manufacturers. DVD playback requires AGP version.

¹Estimated street price after $20 rebate.

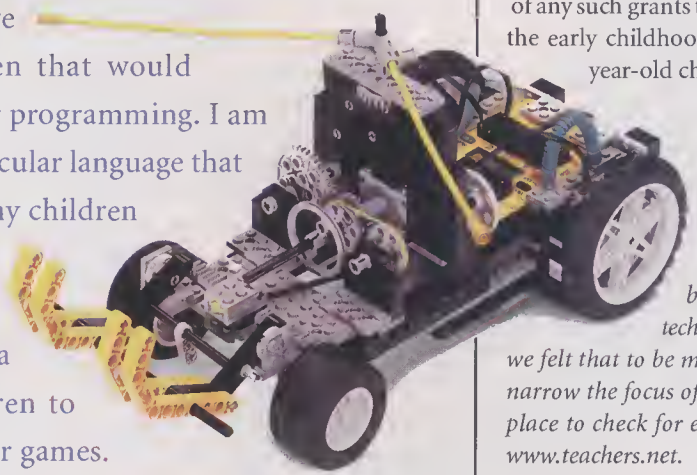
Reader Hotline

Readers respond: Programming for kids, preschool grants, too many CDs, lost online

LETTER OF THE MONTH

Get with the Program

I am looking for a software program for my children that would teach the basics of computer programming. I am less concerned with the particular language that is taught, but I would like my children to understand basic logic and programming concepts. Also, I would like to find a program that allows children to program their own computer games.



Jerry L. Echternacht
West Chester, Ohio

FamilyPC *editors respond: Lego Mindstorm's Lego Robotics lets you write programs to control real-world robots that you build from Legos. Also, check this month's Software Reviews for a look at Interplay's Learn to Program BASIC.*

XXX Marks the Spot

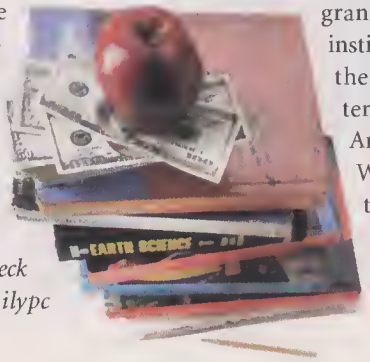
A huge round of applause to Robin Raskin for her suggestion to create an .XXX domain for adult-oriented content (Internet Mom, February 1998, www.familypc.com). I've been cruising the Internet since the early 1980s, and this is the best idea I've heard in a long time. We should start at the top to promote the idea, at the White House and Congress, and work down.

Juan Jimenez
San Juan, Puerto Rico

FamilyPC *editors respond: Check out our Web site (www.familypc.com) and join in on the discussion about our Parent's Bill of Rights.*

Grant Preschool Grants

Our district's technology coordinator recently gave me information regarding the *FamilyPC*/SchoolPC Teachers' Technology grants available to K–12 institutions. On behalf of the Early Learning Center of the Sheboygan Area School District in Wisconsin, I would like to request that, in the future, you include early childhood programs in this type of grant application process.



The nearly 575 children we work with at our school would greatly benefit from new technology that could be acquired through this type of grant. Are you aware of any such grants that are appropriate for the early childhood level (three- to five-year-old children)?

Theresa Mueller
Sheboygan, Wisconsin

FamilyPC *editors reply: While we certainly agree that preschool can be an ideal place to use technology to reinforce skills, we felt that to be most effective, we had to narrow the focus of our grant-giving. One place to check for early learning grants is www.teachers.net.*

Agree About CDs

"Educational CD-ocrity" by Robin Raskin (November 1998 Double Click) hit the nail on the head. I would like to see fewer but better educational software titles.

There is no need to put out new titles every few months. I buy about one or two titles per year, so I look for the best. Your magazine helps me find the best.

Rod Kuhl
Rumford, Maine

Discerning Reader

I believe *FamilyPC* is a necessity for any K–8 educator or family with a computer. I find it by far the most consistently enjoyable, practical, and readable technology magazine on the market. Our schools and families need and deserve the level of excellence you provide.

James Nichols
Montvale, New Jersey

Hacker Attacker

In response to the Parental Guidance column, "Is Your Kid a Hacker?" (November 1998): The writer, Kevin Poulsen, doesn't

ZIFF-DAVIS
a SOFTBANK company

ZD INC.

Chairman and CEO Eric Hippeau
Chief Financial Officer Timothy O'Brien

PRESIDENTS

ZD Publishing Claude P. Sheer
ZD Market Intelligence Bob Brown
ZD Comdex and Forums Jason Chudnofsky
ZD Brand and Market Services Terri Holbrooke
ZD Internet Productions Dan Rosensweig
ZD Education William Rosenthal
ZD Television Larry W. Wangberg

SENIOR VICE PRESIDENTS

Human Resources Rayna Brown
Planning and Development Daryl R. Otte

VICE PRESIDENTS

Information Services Steve Gladyszewski
General Counsel and Secretary J. Malcolm Morris
Controller Mark Moyer
Human Resources, Operations Tracy Nadi

TREASURER

Thomas L. Wright

CORPORATE SALES

Executive Vice President ZD Media Network Joe Gillespie
Executive Director Jeff Bruce
Executive Director Scott Murphy
Executive Director Rita Burke

ZD BRAND & MARKET SERVICES

Vice President, ZD Brand Marketing Brooke Correll
Vice President, Client Marketing Michael Perkowski
Vice President, Corporate Research Elda Vale
Vice President, ZD Brand Management Herb Stern
Director, Corporate Relations Gregory Jarboe

ZD PUBLISHING

President Claude P. Sheer

EXECUTIVE VICE PRESIDENTS

Don Byrnes
Chris Dobbrow
Jack Dolce
Al DiGuido
Thomas McGrade
Michael J. Miller

SENIOR VICE PRESIDENT

Nancy Newman

VICE PRESIDENTS

Bob Bader
John Dodge
Kathleen Goodwin
Roger Herrmann
Jonathan Lane
Eric Lundquist
Jim Manning
Charles Mast
James F. Ramaley
Paul Somerson
Mark Van Name

Executive Director, Licensing Gertrud Borchardt
Director, Benchmark Operations Bill Catchings
Director, ZD Labs Lauren Black
Editorial Director, New Products Bill Machrone

get it. You don't teach kids that hacking computers is wrong because they might get caught. You teach them that hacking is wrong because it violates the right to property and privacy.

Tim McClure
Lisbon Falls, Maine

What's New?

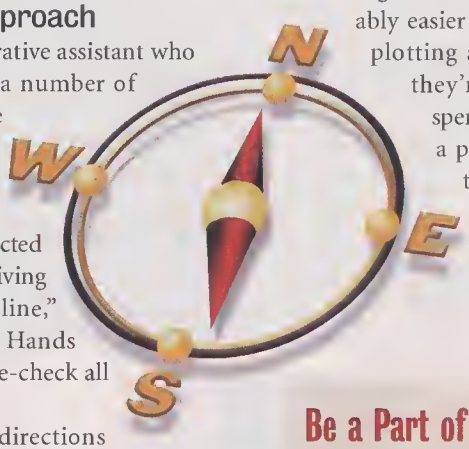
Dan Muse's review of notebooks ("Take It with You," September 1998) was well done and interesting. However, I have a complaint.

Based on Dan's high praise, I tried to find the Toshiba 2505 CDS. Toshiba says the model is being phased out. I realize computers have short sales cycles. However, I suggest you warn readers about a product's distribution status, especially when the products are great values.

Howard Kuiper
Milford, Connecticut

FamilyPC *editors respond: On occasion, the rapid changes in the computer industry outpace a monthly magazine. Although Toshiba discontinued the 2505 CDS, it replaced that model with the Satellite 2515 CDS, which has a sleeker design, a 266-MHz MMX processor, and the same low ($1399) price tag.*

Direction Approach



As an administrative assistant who plans trips for a number of people, I use several online mapping sites. One piece of advice you neglected to give ("Get Driving Directions Online," October 1998 Hands On) is to double-check all the directions.

Comparing directions that three or four sites give me, I sometimes find that directions will come back saying to turn onto "unnamed road" or will list a road that doesn't exist. The mapping sites seem to be the most helpful if you already know the area that you are traveling in.

I agree that these sites are considerably easier than using a map and plotting a course yourself, and they're less expensive than spending the money to buy a program, but I do think they have a long way to go before they are more reliable than a Rand McNally paper map.

Kristen Weis
Seattle, Washington

Mystery Rebus Winner Revealed

Chelsea Johnson, age 6, of Massachusetts, is the grand-prize winner of the rebus contest held by Edmark in honor of Sky Island Mysteries, the newest title in the award-winning Thinkin' Things series. By solving the riddle, Chelsea won the entire Thinkin' Things series of software. Kids ages four to 12 were asked to figure out the rebus, which posed the question: In Sky Island Mysteries, what do you call one of the "creatures in the bleachers"? The answer, of course, is a *fripple*, one of the cute characters in the program, which features 14 mysteries and hundreds of problem-solving challenges for kids.

Be a Part of *FamilyPC*

One thing that makes *FamilyPC* special is our FamilyTested software program — real programs tested by real families in their own homes with their own equipment. If you want to be a part of our family-testing network and help us review software or Web sites, sign up on the Web at Digital Research Inc.'s Web site (www.digitalresearch.com) or at FamilyPC on the Web (www.familypc.com).

Sally is an uncontrollable holy terror. (But Aunt Mavis doesn't need to know that.)

© 1998 Adobe Systems Incorporated. Adobe logo and Adobe PhotoDeluxe are trademarks of Adobe Systems Incorporated.

Adobe®

Whether it's reality or simply your version of it, you'll have a ball sharing your photos with new Adobe® PhotoDeluxe® Home Edition 3.0 software. It's the fun and easy way to enhance, edit and share your photos–in just about every way imaginable. Step-by-step guidance lets you put your fondest memories into everything from cards and calendars to electronic files for e-mail or Web pages. And new projects and ideas are available year-round over the World Wide Web. So let the fun begin. Call Adobe today at 1-800-888-6293 and mention offer 49401. Or visit www.adobe.com/photodeluxe98/

New Adobe PhotoDeluxe Home Edition 3.0

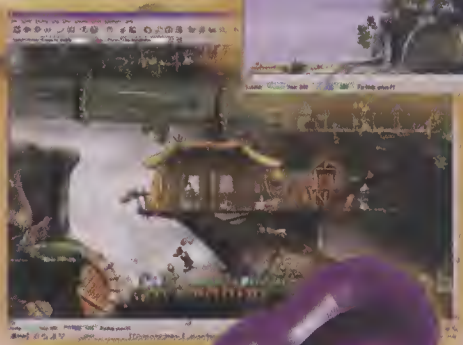
Suddenly, you're unforgettable.

They're Back...

and they've brought some friends!

Smarter Norns make the interactions between Creature and user more fun.

Have fun at the Norn Tree House.



Escape danger through connecting tubes and into hideaway caves.

PLAY in an all new 16-bit color world that's doubled in size.
EXPERIENCE a whole new ecosystem that develops on your screen.
BREED your favorites and experiment with the Genetic Splicer.
TEACH your Creatures – their improved brain function allows them to learn faster.
DISCOVER the many new inhabitants of Albia such as plants, insects and fish.

creatures 2™

MINDSCAPE® ENTERTAINMENT

CYBERLIFE®

EVERYONE
E
CONTENT RATED BY ESRB

Windows® 95/98
Windows NT® 4.0
CD-ROM

www.creatures.mindscape.com

To order, visit your retailer or call
1 (800) 716-8503

©1998 Mindscape, Inc., a division of The Learning Company. All rights reserved. Mindscape is a registered trademark and its logo is a trademark of Mindscape, Inc. Creatures is a trademark and Cyberlife is a registered trademark of Cyberlife Technology Ltd. All images and logos are trademarks of Cyberlife Technology Ltd. All other trademarks are the property of their respective holders. Windows and Windows NT are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

keeping pace

Products Trends and Technology

ILLUSTRATION: BETHANN THORNBURGH

Cabin-Fever Busters

It's snowing in the east, raining down south, and cloudy out west. Problem is, it's been this way for two months, and you and the kids are climbing the walls. We can't control the weather, but we can offer a cure for the common cold of winter with these sanity-saving PC and online projects.

For the Family

Plan a Historic Trip

The History Channel Traveler (historytravel.com) is perfect for planning a day trip or weekend getaway filled with interesting historic locations and lore. Type in a locale to get tons of information about historic buildings and sites to visit, or read suggestions for places and things to see that pertain to everything from the War of 1812 to Christmas and New Year's.

For Kids

Picture-Perfect Friendship Bracelet in 5 Minutes

If the kiddies are going (or driving you) crazy, tap into your collection of digital images for a quick creative project you can do together. Find a group photo of your child's friends, size it to 4 by 6 inches, and print it out on your color ink-jet printer. Trim it into a horizontal band that features everyone's smiling faces. Cover the band with clear Con-Tact paper and attach Velcro self-adhesive fasteners to each end to form a snazzy customized wristband. For more creative craft ideas, visit Family.com's activities pages.

For Teens

Start a Project, Win a Scholarship

If you have creative kids between the ages of 12 and 19, encourage them to enlist a team of buddies to enter the ThinkQuest contest (www.advanced.org/ThinkQuest/index.shtml) created by Advanced Network & Services. The purpose of the competition is to produce sets of Web pages as teaching and learning tools for teachers and students around the world. Awards totaling over $1 million include college scholarships of up to $25,000 for each member of a winning team. But you'd better hurry – deadline for entries is February 28, 1999.

For Fun

Games, Games, Games

At www.funster.com, there are no plug-ins and downloads – just multiplayer, fast-paced word play for all ages and skill levels. You have up to 3 minutes to create as many words as you can out of a word or phrase.

If you want a little more action, it's a great time of year to find game bundles at attractive prices. Look for Sierra's (800-757-7707) King's Quest Series: Volume 1 (four adventure games for $39.95); Mac Entertainment Pack (seven classics such as card, racing, and pinball games for $49.95); Game Pak for Windows 98 (golf, You Don't Know Jack Volume 2, pinball, and cards for $19.95); and the 486 Game Pack for Windows (pinball, cards, fishing, and You Don't Know Jack for $19.95). *–Michelle Megna*

Are the Winter Blues Making You S.A.D.?

It's no secret that folks generally feel a bit more lethargic in the dark days of winter. It's called Seasonal Affective Disorder (S.A.D.) and is often treated by employing devices that mimic natural sunlight during morning and evening hours.

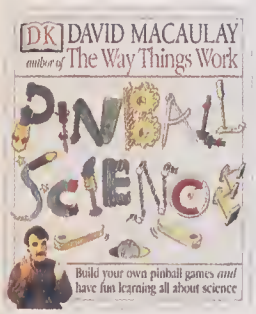
New and Improved Software

• Hanes T-ShirtMaker Deluxe
With this fun software-and-supplies package, you get 1900 designs and 5000 professionally created art images, five sheets of transfer paper, a new photo-editing tool, and a Hanes T-shirt. You can also import your images to make tote bags, mousepads, and more. The software now includes a "made-to-order" capability that lets you order quantities of your design via the Internet. *Austin James, 800-426-3728, www .hanes2u.com; Windows CD, $49.95.*

• Elmo's Preschool 30th Anniversary Edition

This updated Elmo includes 70 new printable activities as well as a personalized learning technology that assesses a child's progress and adjusts to the appropriate learning level. The program also has letter, number, shape, and color activities, along with lessons in sharing and cooperation.
Creative Wonders, 800-622-3390, www .creativewonders.com; Mac and Windows CD, $49.95; ages 3 to 5.

• Pinball Science
David Macaulay, author of *The Way Things Work*, helps kids build their own wacky pinball games using faucets, hot air balloons, gears, and more as the components. While creating their masterpiece, kids learn about energy, friction, gravity, magnetic force, and other scientific concepts; then they get to play their own pinball game.
DK Multimedia, 888-342-5357, www.dkonline.com; Windows CD, $29.95; ages 9 to 12.



FamilyPC Interview

A World Wide Wonderland

What do we know about the effects of emerging media on children? How can businesses, educators, parents, and community groups encourage the production of quality Web sites for kids? **Holly Holmberg Brooks**, executive director of the nonprofit girls' community site girlsite.org, recently addressed a conference in Washington, D.C., sponsored by the Center for Media Education (CME) and the University of Texas–Austin's College of Communications. We caught up with her and asked her a few questions about kids and computers.

I feel we all deserve a community on the Web that can be its own "clean stream," like public television.

FPC: At the conference, you called for the creation of a kind of "national park online" where nonprofit organizations could make high-quality, commercial-free, fun places for kids on the Internet. How do we make this a reality?
Brooks: I feel we all deserve a community on the Web that can be its own "clean stream," like public television. I think we should create some nonprofit portals that have after-school content, the "dot orgs" and "dot govs," and creative exploration. We just don't realize that the window of opportunity we face to shape this exploding medium could close soon. There is an unlimited world of wonderful Web content. The vastness needs to be properly directed. We need a council in place to care for this parkland. Government and policy makers can help by directing nonprofits to collaborate in a common portal, like what we have started through our first site, girlsite.org, and now oursite.org.

FPC: Did you unearth any ideas on how such a concept would be funded?
Brooks: It's a challenge. At the Women In Technology International conference last fall, we saw a number of high-tech companies getting ready to partner with nonprofits or start foundations. At CME, I had several interesting conversations with people from the Carnegie Foundation, the National Science Foundation, and others who understand the whole nonprofit portal concept. Perhaps a consortium would work. Or we could follow the new nonprofit model, which encourages sites to raise their own funds through cause-related marketing. We (girlsite.org) have a number of profit-generating projects that will help us raise funds as we offer others the chance to participate in our programs.

FPC: But not all commercial sites are bad, so are you saying that it's just the sheer number of them that will marginalize the quality of kids' Internet sites overall?
Brooks: No. What I see happening is a real need for nonprofits and noncommercial sites to gather and deliver the goods, and do it as well and with as much excitement as the commercial sites.

–Michelle Megna

Quality HP products *for* the home, *direct* to your home!

Find what you're looking for at the HP Shopping Village:

Printers, Scanners & All-in-Ones
Printers, scanners, and All-in-One products for completing the perfect home office.

Computers
PCs, monitors, Palmtop PCs, calculators and computer accessories to meet your every need.

Printing Supplies
All the ink and paper supplies for your printer - as well as Printable Expressions® greeting cards.

PC Photography
Everything you need to create your own home digital photo lab.

- New and refurbished HP products
- Select supplies for your printer quickly and easily
- Simple-to-use model comparison charts
- Next morning and Saturday FedEx® delivery options available
- Online order tracking
- Order online or call 1-888-774-6847

HP Shopping Village
www.shopping.hp.com/go/familypc

Copyright 1998-99 Hewlett-Packard Company

HEWLETT PACKARD
Expanding Possibilities

Money 99 wins

The reviews are in—and new Microsoft® Money 99 Financial Suite is a winner!

"We're so impressed that, for the first time ever, we're placing Money on our WinList, bumping our long-time favorite, Intuit's Quicken."

WINLIST Windows Magazine — Windows Magazine, 10/98

"It's clean, easy to use, draws on Web resources...and provides very good tools for daily financial management and lifetime financial planning."

PC Magazine, 8/17/98

PC Computing

PC Computing, 10/1/98

"I switched from Quicken because Money 99 gives me a more comprehensive view of my finances. I can see my whole financial picture without spending hours at the PC."

Dr. William Fenn, professor, MI

Try Money 99 Financial Suite FREE† for 90 days!

Call 1-800-866-2806 for a FREE† CD or visit [illegible] for a FREE* download.

Microsoft®

© 1998 Microsoft Corporation. All rights reserved. Microsoft is a registered trademark of Microsoft Corporation in the U.S. and other countries. *Connect time charges may apply. †$7.95 per unit shipping/handling and applicable sales tax apply. Valid in the 50 states and DC only. Offer expires January 14, 1999.

Web Control Made Easy

As Internet use soars, peripheral companies have hurried to add one-button scrolling functions to mice and trackballs to make scrolling Web pages easier. Kensington does them one better with its WebRacer ($59.99; 800-280-8318, www.kensington.com), a sleek input device with 13 Internet-specific buttons and a touchpad. Sure it scrolls, but it also has six preset buttons that work similarly to the preset buttons on your car radio: Surf to a site you like; then press the button and hold it until the site gets registered. Once you've programmed a button, you just press it and your Web browser automatically launches and goes directly to the stored site (this could be paticularly useful if you have very young kids using the Internet).

WebRacer has six more keys that perform common Web functions: back, forward, reload, stop, and print. It also has an e-mail key that allows you to go directly into your e-mail program. A menu button provides access to your bookmarks. And a "soft keyboard" function allows you to enter search terms without using the keyboard.

—Michelle Megna

Family Flicks

KidFlix.com is a new video guide and retail site that's more welcome to families than a matinee with no line at the concession stand.

kidflix.com

KidFlix offers movies for sale at prices that are 20 percent below manufacturers' suggested retail price. The site features ParentsPad, which has guest interviews, message boards, and family-focused articles on entertainment; For the Babysitter, which suggests titles that both kids and sitters will enjoy; columns by authors of kids' entertainment and video guide books; and Soapbox, which allows kids to post their own movie reviews. There are keyword and themed search functions. Pass the popcorn.

Family Favorites

The top-selling family videos at KidFlix at press time:

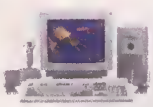
- *Lady and the Tramp*
- *Casper Meets Wendy*
- *Scooby-Doo on Zombie Island*
- *Dance with the Teletubbies*
- *The Black Cauldron*
- *An American Tail*
- *The Batman/Superman Movie*

–Michelle Megna

Bargain Bytes

Val-Pak (www.valpak.com), a new Web-coupon site from the snail-mail coupon giant, is going to save the 83 percent of adults in the U.S. who collect coupons a lot of clipping. The site claims to offer 30,000 coupons for localities all around the U.S. Just type in your ZIP code, select your city, and choose a category, and Val-Pak shows you the coupons. You pick the ones you want to include in your virtual Val-Pak Envelope, and print them. We found coupons mostly for national chains like Domino's and Subway, but the site promises more to come. *—Michelle Megna*

Yamaha Speakers Sound Better, Even On Paper.



With exclusive Yamaha Active Servo Technology (YST) and spruce cone architecture, the Yamaha YST-MS28 Speaker System floods your senses with vivid, spectacular sound that invigorates games and music.

The subwoofer and satellite speakers use superior Yamaha YST technology to produce deep, rumbling bass that no other speakers can match. It brings the menacing approach of a T-Rex to life with frightening conviction.

At the heart of the compact, adjustable satellite speakers, spruce cones deliver brilliant highs capable of belting out screaming guitar solos.

In fact, Yamaha speakers are the music industry reference standard; they're used in nearly every recording studio in the world.

In addition to the excellent sound, the YST-MS28 gives you two stereo inputs, a headphone output jack, magnetic shielding, convenient controls and total compatibility with all computers and game systems.

Your ultimate computer system is incomplete without Yamaha speakers. And you can own the YST-MS28 for under $80, or choose any of Yamaha's other award-winning speakers and subwoofers. Because as good as they sound on paper, hearing them is an absolute blast!

YAMAHA

THE WAY YOUR COMPUTER SHOULD SOUND.

For a brochure, call (800)823-6414 ext. 513 or visit www.yamaha.com. ©1998 Yamaha Corporation of America, Consumer Products Division, P.O. Box 6600, Buena Park, CA 90622-6600

SOUNDCARDS • MULTIMEDIA SPEAKERS • CD-REWRITABLE RECORDERS • HEADPHONES

BEST BUY · COMPUSA THE COMPUTER SUPERSTORES · ComputAbility Your PC Discount Specialists · Fry's ELECTRONICS · MICRO CENTER THE COMPUTER DEPARTMENT STORE · Office DEPOT · TigerDirect

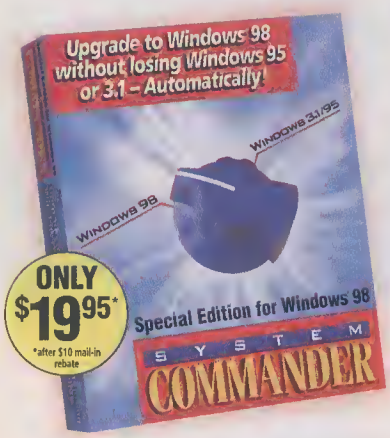
Mickey Mice

If you want to keep Mickey and Minnie close at hand, Disney Interactive's lineup now appears as mice and mousepads (www.coolmouse.com). Other stars making the scene include characters from *The Lion King*, *The Little Mermaid*, *Toy Story*, *A Bug's Life*, and *101 Dalmatians*. Items will be sold separately and also as bundled kits with software; prices range from $9.99 to $59.99.

Artificial Turf

Ban that blah rubber mousepad and get snug as a mouse in a rug: The Lextra MouseRug is a custom pad created by scanning beautiful handwoven, museum-quality carpets, digitizing the image, and reproducing them in a rug-type material that still allows for easy gliding. These cool carpets are available only at museum stores and via the Web (www.mouserug.com; $19.95), but they come with a money-back guarantee.

Lextra MouseRug®
Patented Worldwide



Upgrade to Windows 98 without losing Windows 95 or 3.1!

Installing Windows® 98 will replace your current Windows 95 or 3.1, making it nearly impossible to return to your reliable Windows.

Are you and your PC ready for that? Will you be able to get to your data and documents when you need to? Would you have the time to stop everything if necessary to work out the kinks of your new Windows so you can use your software, printer, fax and e-mail?

GET YOUR WORK DONE, NO MATTER WHAT. By protecting your Windows 95 or 3.1, ***System Commander® 98 (SC98)*** lets you have both Windows 98 and your familiar Windows 95 or 3.1 on your PC! You can keep on working when you want to, because your original Windows, data and applications have been safely preserved exactly how they were **before** you installed Windows 98.

AS EASY TO USE AS IT IS TO INSTALL. The SC98 installation is totally safe and automatic. Everything is in plain English... no confusing "computer-ese." Once installed, to access Windows 98, simply select it from the SC98 menu. To switch to your original Windows, just reboot and select it from the menu. That's it! SC98 allows you to safely configure Windows 98 and work out the kinks at *your own* pace.

• Safeguard your ability to get your work done while you transition risk-free to Windows 98! •

V Communications, Inc.
Order online at www.v-com.com
sales@v-com.com • 408.965.4000

CALL NOW AND SAVE!
Get this special edition of System Commander for only $19.95*!
800.648.8266
*after $10 mail-in rebate. Offer subject to change without notice.
Also available at these major computer stores: Best Buy, CompUSA, Computer City, Fry's, Micro Center, Office Depot, Office Max, Staples and more!

90-DAY MONEY-BACK GUARANTEE UNCONDITIONAL

System Commander is a registered trademark of V Communications, Inc. Windows is a registered trademark of Microsoft Corporation. All other logos and product names are trademarks or registered trademarks of their respective companies. ©1998 Copyright All rights reserved.

MC-10FPC01

Search for Intelligent Sites

Alexander Palace Time Machine

www.alexanderpalace.org/palace/mainpage.html

Take an impressive tour of the palace that was home to Russia's last tsar, Nicholas II.

This site offers layers of cultural and architectural history, with views of the palace interiors, biographies, a Romanov family photo album, and other artifacts. The Tsar's Table gives a history of court dining, complete with actual menus from special occasions.

First Lines: A Sort of Literary Test

pc159.lns.cornell.edu/firsts/index.html

To those who say "I saw the movie," this site responds, "Yeah, but did you read the book?" First Lines is good fun for the well-read who appreciate literary trivia. The challenge is simple: The site presents you with a first line of a famous work, and you name the correct title. Categories include children's stories, Nobel Prize winners, and English literature.

Tufts University Nutrition Navigator

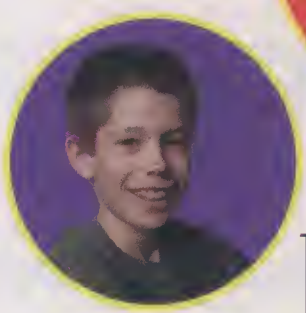
navigator.tufts.edu/about.html

This site attempts to solve the two problems that arise when you use the Web to find nutrition information: how to find the specific information you need and how to figure out if the information is medically sound. The Tufts nutritionists review and rate health sites on the Internet and report their findings on accuracy, depth of information, and usability. *–Julia Lynch*

SmarterKids.com™

The Personalized Learning Store for Your Child

Select products for smarter kids. Yours.



More than 1,000 educationally sound products, expert-reviewed and now easy to find by subject, grade and learning style. Everything designed with one child in mind – yours.

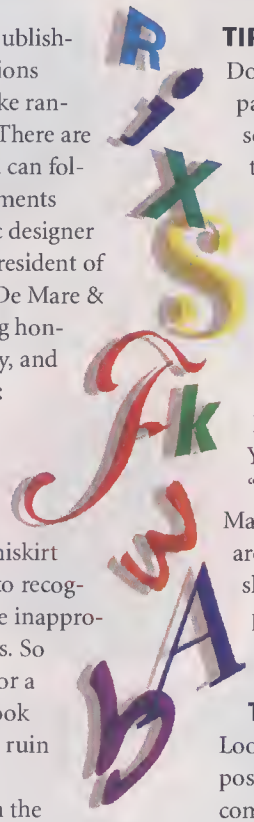
How does your child learn? Try our *free* 20 question quiz at

Go

www.smarterkids.com/priority

Fantastic Fonts

If you love desktop publishing but your invitations come out looking like ransom notes, never fear. There are some general rules you can follow to keep your documents looking sharp. Graphic designer Vincent A. De Mare, president of New York City–based De Mare & Partners, makes a living honing such rules every day, and he offers these five tips:



TIP 1: Remember the Reader

Just as you wouldn't wear a pink sequin miniskirt to a funeral, you need to recognize that some fonts are inappropriate for some projects. So the font that's perfect for a CD label — a comic book font, say — may be the ruin of your newsletter.

"Picture your face on the page talking. Are you playing? Are you informing? Are you screaming? Are you being coy? Reflect the mood in the fonts," De Mare said.

TIP 2: Keep It Simple

Don't mix too many types of fonts on a page. For newsletters and reports, one serif font (the kind with short lines on the ends of the letters, like what you're reading now) and one sans serif font (like the font in the headline of this piece) make a balanced mix. Use the sans serif for headlines and the serif for body text, and vary the sizes (don't go smaller than 9 point or larger than 12 point for body text). For a list of common fonts, see "Put Your Best Face Forward" below.

"Readability is the whole point," De Mare said. "Just because fonts like Times are common doesn't mean that you shouldn't use them. They work because people can read a lot of text in these typefaces without working too hard."

TIP 3: Steal, Tinker, and Test

Look at pleasing layouts in magazines, posters, and books to see what types of combinations work, and use them as inspiration. According to De Mare, most artists are thieves who take the best pieces and ideas from many other works, personalize them, and call the final product their own.

TIP 4: Do Not Distort

Don't edit fonts. "Any widening or narrowing distorts fonts, making them hard to read," De Mare said.

TIP 5: Beware Bold, and Put a Cap on All Caps

Lots of people think putting the most important part of their document in **bold** or ALL CAPITAL LETTERS will emphasize the text. Keep the text in normal style and use boxes, illustration, colors, or position to draw attention. Bold, italics, and uppercase are more difficult to read when they are overdone. Use indents and bullets to highlight important points.

—Michelle Megna

Put Your *Best* Face Forward

Fonts, like people, come in all shapes, sizes, and personalities. Here are 10 common fonts, included with most word processors, that you can always turn to for help.

- Times Roman expresses authority.
- **Chicago has a digital edge.**
- Courier makes it official.
- **Frutiger is for the bold stuff.**
- Geneva is as plain as day.
- Goudy Text looks very old.
- Lucida is in a league of its own.
- *Mistral shouts out in surprise.*
- Monaco enjoys its space.
- Rockwell is as classic as they come.

Kemosabe's Font Source

Font fanatics (i.e., Letter Heads) could easily edge out Trekkies as having the most rabid online discussion forums, groups, and fan clubs. If you want a comprehensive site that mixes practical information with lots of free downloads, links, and news, let the wise Kemosabe lead the way (www.magnagraphics.com/fonts/).

Adobe at Home

If you're looking for a software package to help you turn your digital photos into cards, calendars, T-shirts, creative newsletters, and more, check out Adobe PhotoDeluxe Home Edition 3.0 (Mac and Windows CD, $49; Adobe, 800-888-6293, www.adobe.com), which comes with templates for hundreds of projects.

Manage Your Font Collection

Fonts getting unruly and you don't know what to do? Download FontLib 98 (ITB Solutions, free to try, $19.95 if you decide to buy) from the ZD Net Software Library (www.zdnet.com/swlib/graphics/font_tools.html). This utility lets you organize, install, delete, view, and print samples of your fonts. One hot feature is the ability to group fonts in preconfigured sets, such as novelty, picture, favorites, and sans serif, so you can keep track of what's where.

An Investor's Dream. A Broker's Nightmare.

Introducing the new E*TRADE. The Web's one-stop financial center. With 10x more research.* More tools. More power.

All You Need to Invest

You can invest in stocks, options, and over 4,000 mutual funds. You also get cash management features like free checking, direct deposit, and competitive interest on uninvested funds.

Free Real-Time Quotes

Because old information is bad information. Also get breaking news. Charts. Analysis from leading sources. Morningstar research. Upgrades. Downgrades. All for free.

Still $14.95 a Trade†

E*TRADE not only gives you free tools to track and manage your money, but you can place orders around the clock—online or by phone—and trade stocks for as low as $14.95.

1-800-ETRADE-1
www.etrade.com
aol keyword: etrade

E*TRADE®

Someday, we'll all invest *this* way.®

*10x more research than previous generation Web site. †Nasdaq, limit, and stop orders are $19.95. For listed orders over 5,000 shares, add 1¢/share to the entire order. Add $15 for broker-assisted trades. Direct modem and touchtone connect fees are 27¢/minute, but with a credit of 12 free minutes per trade, you may pay nothing. Orders executed during market hours. ©1999 E*TRADE Securities, Inc. Member NASD, SIPC.

Home Ergonomics 101

Is your PC a pain in the neck? Considering that lots of people — from the smallest to the tallest — share a typical family PC, chances are good that someone at home is feeling the strain. Alan Hedge, a professor in the department of design and environmental analysis at Cornell University (in other words, an expert), suggests the following:

➪ **Get adjustable equipment.** It's a lot easier to adjust your chair than to find an adjustable desk. When it comes to furniture, Hedge said, "Chairs should adjust up and down and front to back. You should be able to adjust the keyboard's position so it's as low as possible and preferably tilted away from your body."

➪ **Take a test run.** Caveat emptor — let the buyer beware. Just because the manufacturer says a product is ergonomic doesn't mean it's right for you. "The word *ergonomic* is overused," said Hedge. "Apply common sense — make sure you can all sit comfortably and reach the keyboard and mouse without overreaching." That means try before you buy: Check out products in a try-it-before-you-buy-it furniture store (even if you plan to buy mail order).

➪ **Keep your hands straight and level.** Repetitive stress injuries such as carpal tunnel syndrome cost companies over $20 billion a year. Hedge says proper hand position — wrists straight, with no weight on them — helps avoid trouble with the tendons.

➪ **Position the monitor.** A monitor that tilts helps accommodate everyone in the family, no matter how tall. Your monitor should be at least an arm's length away from you and at eye level or lower (but not so low that your chin's on your chest).

➪ **Keep moving.** Sitting in a static position is tough on your body; a static posture gets fatiguing very quickly. Active sitting promotes dynamic muscle activity and increases blood flow to your muscles (see the PostureBall, below). Be sure to get up and stretch every 15 minutes.

When you're investing in a chair or a computer table or cart, Hedge recommends that you bring along the tallest and shortest members of your family. "If they're both comfortable with the setup," he said, "it should be fine for everyone else in the family."

Check out these Web sites for more information on active sitting and other ergonomic options: www.ergoweb.com/Pub/ewhome.html and www.ur-net.com/office-ergo/conventi.htm.

—Lauren Simonds

Have a Ball **Makers of the Posture Ball (www.postureball.com) claim that sitting on it instead of a chair promotes better circulation and posture, leading to less back and leg strain. (Plus, it's a lot of fun).**

Now Hear This

Billing itself as the world's first online hearing test, the Handtronix Web site uses Shockwave technology to let you listen to sound pitches in the 1000- to 4000-Hz range. Listen in at www.handtronix.com/HTX/HearTest.html.

Med Reminder

In a hectic life of errands, work, and afternoon carpools, it's hard to remember the important stuff, like annual checkups and flu shots. Lean HealthTracker, a specialized database for Windows, helps you keep tabs on your family's medical appointments, test results, medical expenses, and upcoming appointments. Download a free trial copy from www.zdnet.com. If you like it, it'll set you back $19.95.

Healthy Alternatives

Curious about natural herbs and what they can do for you? Check out NaturBase from 3dtx to learn about 314 herbs. You'll find information on preparation, dosages, side effects, indications, contraindications, warnings, and supplements.

The program is easy to search by common name, genus, species, synonyms, product, component, or herb. To try this $39.95 Windows shareware application, type NaturBase in the search box in the software library at www.zdnet.com.

PHOTOGRAPH — LOWER RIGHT, PHOTODISC

"We led the league in home runs, stolen bases and R.B.I.s.
But it was our UMAX scanner that made us famous."

Little-league baseball cards. Personal Web sites. Emails with photos. Just a few of the things you can do with a UMAX scanner.

ASTRA 1220 SERIES.
Make it into the big leagues for under $200.

The process is simple: scan your photo with a UMAX Astra 1220 scanner, add your favorite artwork, and print. Suddenly, the scouts are calling. And you've never looked better. That's because Astra 1220 scanners boast true 600 x 1200 dpi optical resolution and 36-bit color quality. Which means you'll see things other scanners can't show. Like the exquisite shades of pine tar on your bat. Every colorful stitch on your team jersey. Heck, you'll even see the hotdog guy in the background. And since Astra 1220 scanners cost under $200, they win M.V.P. honors for quality and value. Our scanner line-up supports both PC and Mac platforms, and with Parallel, SCSI, or USB interfaces, there's a model that's compatible with your computer. They also come with easy to use imaging software, including Adobe PhotoDeluxe.™ So, if you're ready to be famous, pick up an Astra 1220 scanner at your nearest computer retail store. Or for more information, check out www.umax.com/team or call 1.800.278.UMAX. After all, your career may depend on it.

UMAX ASTRA 1220

COMPARISON	Astra 1220	HP 6200C
Optical Resolution	600x1200 dpi	600 dpi
Color Quality	36-bit	36-bit
Price	$129-$179	$399

*According to InfoTrends, IDC and PCData, 1998 ©1998 UMAX Technologies, Inc. All rights reserved. UMAX is a registered trademark of UMAX Technologies, Inc. All other brands and product names are trademarks or registered trademarks of their respective companies.
Prices listed are estimated street price and may be subject to change.

UMAX. Number one in U.S. scanner sales.*

UMAX®

New Year's Tips on Family Finances

If you've resolved to get the family's finances in order and you plan to make that resolution last past the final whistle of the New Year's Day football game, our six simple tips will make it easy. Of course, the first step in building your resolve is to enlist some help (in this case, from your family PC). With the right software and our lessons on stick-to-itiveness, you'll not only stay on top of your day-to-day expenses, you'll also start building a plan for the future and a complete set of records for next year's 1040. Plus, you'll be able to tick off at least one resolution on your list (you're on your own for the rest).

More than 10 million U.S. households use Quicken to manage money.

Source: Intuit

• **Start now.** The best way to keep a resolution is to immediately take steps to accomplish it. That means installing a personal finance manager — Quicken or Microsoft Money — this month. The week or two's head start should give you enough time to get used to the software.

• **Begin slowly.** Don't take on too much too soon. For the first month or more that you use finance software, stick with just a couple of accounts — your checking account and the credit card you use the most. Add more accounts, including investments and loans, gradually.

• **Try a new way of doing things.** If you haven't started banking online yet, use your personal finance program to connect to your bank, or use your bank's simpler software. If you're already committed to a finance program that your bank doesn't support, take the easy route: Switch banks rather than software, at least for your checking account and credit cards.

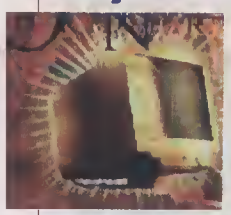
• **Get the right supplies.** A good resolution is an easy-to-keep resolution. Make electronic check tracking easier on yourself (and save dozens of hours in the process) by buying blank checks that you can run through your printer. Rather than writing checks by hand and then entering them into the personal finance program, just do them once: Enter them into the program and then print them with your laser or ink-jet printer.

• **Don't fall behind.** Nothing leads to a broken resolution faster than falling behind. Stay on top of your family finance chores by regularly entering bills into your family finance program (once every two weeks works best) and balancing accounts as soon as you receive statements.

• **Have a fallback plan.** Just because you've computerized your family finances doesn't mean you should go paperless. Keep receipts, bank statements, and the like in case the IRS wants corroboration for your electronic tax return and records.

—Gregg Keizer

Play the Market *Risk-Free*



Love the thrill of making a mint but can't find two dimes to rub together (or plow into the market)? Don't let that stop you from playing the market – just play it as a game.

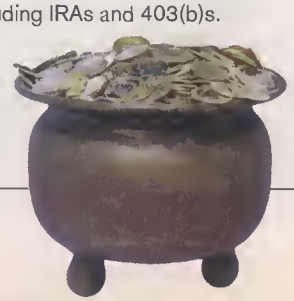
One make-believe portfolio that even gives a cool prize to the boldest investor each month is ZDTV's Money Machine Investment Challenge. To play the market with $100,000 in imaginary money, head to www2.nordby.com /challenges/ZDTV/default.htm.

Track Stocks with StockVue

If the stock trackers at sites like Yahoo, Infoseek, and Excite feel a bit thin, you can follow the market in style with StockVue, a freeware portfolio tracker that's ready to download from www.alphaconnect .com. This freebie is chock-full of investment goodies, and it even puts a ticker on your screen so you can follow your funds.

401(k) Pot of Gold

Contributing to your 401(k) plan is a brilliant idea when your employer matches your contributions. But to track this smart move, download the shareware program Retirement Planner 98 (formerly called $401K Planner) from www.torrid-tech .com. It graphs your retirement progress with all sorts of plans, including IRAs and 403(b)s.



PHOTOGRAPHS PHOTODISC

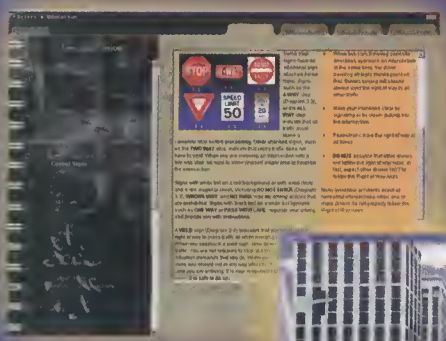
"Overall, Driver's Education is a sure way to help get a person used to the realities of the road in a safe environment."

–Motor Trend, April 1998

Take it for a joy ride.

No license? No problem...

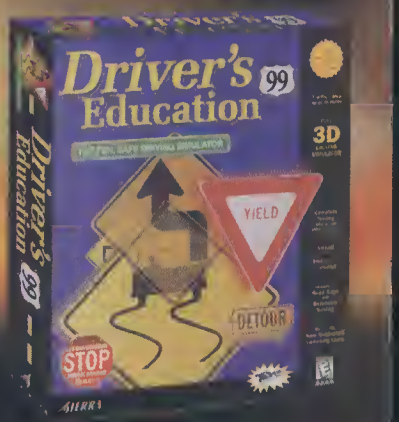
Learning to drive has never been more fun or safe than with Driver's Education '99, the complete 3D driving simulator. Hit the streets of the 3D virtual city, with the comfort of your personal driving instructor, Driver Ed, by your side to give you hints and tips. Real world situations reinforce defensive driving techniques and prepare you for the day you get your license.



FULL **3D** Driving Simulator

- *65 comprehensive lessons covering the traffic laws for all 50 states, including defensive driving and road rage*
- *Complete testing with actual state test questions so you are ready to pass your test the first time*
- *Risk-free 3D driving simulator with urban and rural driving situations, including a drunk driving simulator*

#1 Best Selling Street Driving Sim



SIERRA™

www.studentdriver.com

CONTRIBUTED BY PRESTON GRALLA

Learning to Share

On the front line of the PC wars with the Gralla family: Four people, one PC — who gets to use it when?

In the earlier, more innocent days of our nation, family conflict erupted as a result of big issues: Who will inherit the family manse? Which lucky child out of eight gets the family's limited resources to attend college? Who gets to eat the last drumstick at Thanksgiving dinner?

No longer. Today the biggest issue tearing apart millions of American families is a bit more mundane: When there are four people and only one PC, who gets to use it and when?

For the Gralla family, a typical weekday afternoon looks like this: Nine-year-old Gabe wants to get online to meet his StarCraft clan-mates at www.battle.net and kick some serious alien rear end; 13-year-old Mia wants to log on to America Online and chat with her online buddies (under the guise of doing her homework); their mom, Lydia, wants to send yet another blistering e-mail to Congress so she can straighten out the country's woes; and me, well, all I want to do is get on the PC so I can meet a book deadline and put food on the table next month.

Twenty-five percent of American households have more than one PC. Until very recently, the Grallas weren't one of them.

ILLUSTRATION: VITO ALUIA

We've lived with this problem for almost 10 years, and those years have yielded some hard-won advice for families in similar situations. Follow this advice, and your family may never fight over computer time again. (As for who gets the last drumstick, I find arm wrestling is best.)

Here are my five tips for sharing a family PC.

• **Use a timer.** One way to make sure everyone gets his or her fair share of PC time is to place an ordinary kitchen timer next to the computer. When more than one child or adult wants the computer, the timer goes on and one person gets the computer for 20 minutes. Then, when the bell goes off, it's time for the next person to use the PC (either that, or your meat loaf is done).

• **Tell your kids it's time to walk the dog.** You need the computer so you can finish your monthly sales report, but your child is using it. What to do? Tell her it's time to do a household task, like walking the dog. Of course, this doesn't work in my house; we don't own a dog. We have a rabbit named Pollichinelle, but she rarely needs walking.

• **Make a time sheet.** Assign your kids specific times when they can use the PC — a particular time of the day or week when the computer is theirs. This keeps conflicts to a minimum. In our house, Gabe's an early riser, so we gave him the first PC shift on the weekends. The only problem was that my wife and I were frequently awakened in the hours before dawn by the sounds of intergalactic combat rattling in from the computer room/sun porch adjacent to our bedroom. The scary thing was that at that time of the morning the Net was often full of kids playing StarCraft. We've since adjusted Gabe's PC playing time so we can get some sleep on the weekends. How the world will now be kept safe from marauding aliens, we don't know, but at least my wife and I will be rested when they get here.

• **Throw a tantrum.** Your kids are arguing yet again about whose turn it is to use the computer, and you just can't stand hearing their squabbling anymore. Take a page from *their* playbook:

Throw a tantrum. Threaten to smash the monitor or to hurl the computer out the window, scream that you'll chop the whole system into little pieces with an ax and then dance on the remains in the middle of the street. Will this solve anything? No. Tantrums never do. But it will make you feel much better, and that's an end unto itself. Also, your kids may now treat you with new respect — they didn't know you had it in you. And if you have an adolescent, just the thought of the public spectacle you'd cause if you began dancing in the street for any reason would force her to give in to any of your demands.

• **Buy a second computer.** Give in to the inevitable. We have. Some households are two-car families; we've become a two-PC family. I use a laptop that I take back and forth between work and home. Lydia, Gabe, and Mia share the other PC. And while there are still some arguments among my kids and my wife over who gets to use the PC, I tell myself that the heart of building a strong family is not just in getting along when times are good, but also in learning how to resolve conflicts when times are difficult. (Very wise and thoughtful for a guy who's got a PC to himself now, I know.)

I must admit, though, having two PCs has created an entirely new issue: Who gets to use our single telephone line to dial in to the Internet?

Preston Gralla *is executive editor of ZDNet and the author of 10 books. E-mail him at preston_gralla@zd.com.*

Gabe's Response

Don't listen to my dad. He's not an expert. I know how to handle it. Just buy one computer for each person. But if you don't have enough money, like a normal person wouldn't, I know the answer. Just let the person who does the funnest thing with the computer use it all the time. Like me, because I play StarCraft.

Mia's Response

Great. Here is my dad talking about dancing in the streets in a public article – how embarrassing is that? Anyway, as good as my dad's ideas are, sometimes they just don't work. How about when you are in the middle of a long, important e-mail that you can't save when *ding* – the timer goes off, and if you don't get off the computer right away, you'll soon hear a screaming brother yelling "Mom! Mia won't get off the computer!" My advice: If your parents force you into this timer thing, keep your eyes on the timer at all times.

Another idea to get your turn to last a little longer is bribery/revenge. Let's say the above situation happens. Tell your brother or sister, "Just remember that the next time you're <*insert brother/sister's favorite thing to do on the computer*>, you'll have to get off right away!" That should get you a few extra minutes.

One last thing. There needs to be a new rule in my house, and it might be a good idea for your house, too. The rule should say, "When <*insert your name*> wants a turn, they should get it right away."

's first Web site - This 5th grader put school newspaper on the Web in just irs with ixla Web Easy.

's Realty site - After trying for 10 months, another Web program, Joe was up and ng his houses on the Web in one hour!

200 Million Americans still don't have a Web site...

At least not yet!

Small business owners. Hobbyists. Students. Retired People. Families. Millions of Americans want to create their own Web site, but are intimidated by Web creation tools presently on the market. Now that's all changed.

Introducing ixla's Web Easy, a low-cost WYSIWYG program aimed specifically for the first time user and/or currently frustrated Web designer. IXLA's easy-to-use Web page templates and Wizards prompt you every step of the way-from design, right up to automatically sending your Web page to your Internet Service Provider! First time users will have their first page up on the Web in less than an hour!

You've been waiting long enough. Join the millions who want nothing more than to design their own Web site right now; stop by your local computer retailer today, and show the world your first Web page in less than an hour!

Available at most major retailers.

PCWEEK BEST OF COMDEX FINALIST

ixla We've got the tools, you bring the imagination.

Visit us at www.ixla.com
or call us at 1-800-486-6704
Quote Code No.: FAM108

BUILT FOR YOU

BUILT FOR YOU

BUILT FOR YOU

Compaq Presario 5100C-400

$1,699 - $100 mail-in rebate**

$1,599 (with Monitor)

Great Introductory Price!

- AMD-K6®-2/400 processor with 3DNow!™ Technology
- 8.0 GB Ultra DMA Hard Drive[1]
- 128 MB SyncDRAM expandable to 384 MB
- 5X DVD-ROM Drive[6]
- 1.5Mbps Digital DSL Modem (G.Lite/56K V.90)[3]
- 2X AGP ATI 3D Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- Microsoft® Featured Home Collection
- Microsoft Windows®98
- Compaq V720 17" Monitor (15.9" VIA)
- JBL Pro Speakers

Personalize it by choosing:

- 256 MB SyncDRAM: Add $250
- 12.0 GB Hard Drive:[1] Add $120
- Iomega Zip Built-In™ Drive: Add $99

Compaq Presario 5600-450

$2,649 - $100 mail-in rebate**

$2,549 (with Monitor)

- Intel® Pentium® II Processor, 450 MHz
- 13.5 GB Ultra DMA Hard Drive[1]
- 96 MB Sync DRAM expandable to 384 MB
- 5X DVD-ROM Drive[6]
- 1.5Mbps Digital DSL Modem (G.Lite/56K V.90)[3]
- 2X AGP Graphics w/8 MB SGRAM
- Digital Creativity Imaging Center
- 10 Mbps Ethernet port, Cable Modem Ready
- Iomega Zip Built-In™ Drive
- Microsoft Office 97 Small Business Edition v.2.0
- Microsoft Windows98
- Compaq V910 19" Monitor (18.0" VIA)
- JBL Pro Speakers

Personalize it by choosing:

- 16.8 GB Hard Drive:[1] Add $139
- Diamond Viper 550 AGP w/16 MB SDRAM: Add $50
- JBL Pro Premium Speakers w/Subwoofer: Add $79

Compaq Presario 5600-400

$2,099 - $100 mail-in rebate**

$1,999 (with Monitor)

- Intel Pentium II Processor, 400 MHz
- 10.0 GB Ultra DMA Hard Drive[1]
- 64 MB SyncDRAM expandable to 384 MB
- 32X Max CD-ROM Drive[5]
- 56K ITU V.90 Modem[2]
- 2X AGP Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- Iomega Zip Built-In™ Drive
- Microsoft Office 97 Small Business Edition v.2.0
- Microsoft Windows98
- Compaq V910 19" Monitor (18.0" VIA)
- JBL Pro Speakers

Personalize it by choosing:

- 13.5 GB Hard Drive:[1] Add $50
- Diamond Viper 550 AGP w/16 MB SDRAM. Add $50
- 5X DVD-ROM Drive:[6] Add $100

Compaq Presario 1650

$2,599

- Intel Pentium II Processor, 266 MHz
- 4.0 GB Ultra DMA Hard Drive[1]
- 64 MB SyncDRAM expandable to 96 MB
- 512 KB Internal Pipeline Burst Cache
- 24X Max CD-ROM Drive[4]
- 56K ITU v.90 Modem[2]
- 128-bit Accelerated Graphics w/2 MB VRAM
- Smart Li-Ion battery
- Internet Easy Access Buttons
- JBL Pro Audio System with Bass Reflex
- Microsoft Windows98
- 12.1" TFT Active Matrix Display

Personalize it by choosing:

- Port Replicator: Add $100
- Executive Leather Carrying Case: Add $200
- Tripp Lite 140 Watt Inverter: Add $50

Buy one of these computers and get **50 free hours** on the Net.* Plus, get a **$100 rebate** on these select Compaq Presario minitower, desktop, or notebook PCs by signing up for this Compaq Easy Internet Access free trial.**

All prices shown are Compaq Direct selling price after applicable rebate. Prices shown do not include applicable sales tax and shipping. Products and prices valid in U.S. only. Actual retail price may vary. Specifications and prices are subject to change or cancellation without notice. Not all Compaq Presario models available in all retail stores. ***50 free hours of Internet access is offered when Compaq Easy Internet Access is chosen from Compaq Internet Setup. Valid only on selected Presario minitower, desktop, and notebook models. For select minitower, desktop, and notebook models: the 50 free hours must be used over a 30-day period from initial setup. A valid credit card is required to initiate service, although no charges will be incurred until the 50-hour trial has expired. **$100 mail-in rebate from Compaq upon activation of this free trial of Compaq Easy Internet Access. Rebate offer valid only in the USA and expires 4/30/99. See rebate coupon included with product for additional terms and conditions.** [1]For hard drives, GB = billion bytes. [2]ITU V.90 modems are designed only to allow faster downloads from K56flex or V.90 compliant digital sources. Maximum achievable download transmission rates are currently unknown, may not reach 56 kilobits per second (Kbps), and will vary with line conditions. [3]The 1.5Mbps Digital DSL Modem (G.Lite/56K V.90) protocol is designed to allow faster downloads from G.Lite/56K V.90 compliant digital sources. Availability of services will vary by region and Internet Service Provider (ISP), and may differ from V.90 ISP services. Maximum achievable download transmission rates with G.Lite/56K V.90 are currently unknown, may not reach 1.5Mbps or 56Kbps, respectively, and will vary based on service provider, line conditions, and distance. [4]24X Max CD-ROM data transfer rates may vary from 1500 to 3600Kbps. [5]32X Max CD-ROM data transfer rates may vary from 1800 to 4800Kbps. [6]The 5X DVD-ROM Drive transfer rate is up to 6,750 KB/s compared to 1,352 KB/s for 1X DVD-ROM Drives. One year parts and labor. Labor for desktop systems is carry-in service with on-site service during the first 90 days of ownership. Labor for notebook systems is pick-up service. Compaq is not liable for pictorial or typographical errors in this advertisement. Compaq, the Compaq Logo, and Presario are registered in the U.S. Patent and Trademark Office. Intel, the Intel Inside Logo, and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. Microsoft, MS, and Windows are registered trademarks of Microsoft Corporation. AMD-K6 is a registered trademark of Advanced Micro Devices, Inc. Product and company names mentioned herein may be trademarks and/or registered trademarks of other companies. **Call Compaq Monday-Friday 7:00am-11:00pm (CST), Saturday and Sunday 7:00am-7:00pm (CST).**

©1998 Compaq Computer Corporation. All rights reserved.

Easy. Have Compaq build one just for you. Nobody knows what you need in a computer as well as you do. So shouldn't you be the one to decide what goes into yours? When you order these Presario Internet PCs you're in the driver's seat. You choose how much memory you want, whether or not you want a CD-ROM drive, even the type of monitor you want. Whatever you choose to put in yours, you can rest assured that all our PCs are designed with the latest and greatest Compaq innovations and technology. Just stop by a Compaq *Built For You Custom PC Center* at select retailers, give us a call, or visit our website. Tell us what you want in your computer and we'll build it for you. **Bring the world's best-selling computer home today.**

EXTRA MILE SERVICE

Purchase yours at your favorite retailer, or buy direct from Compaq. Visit us at **www.compaq.com/athome** or call **1-800-632-8254.**

Take advantage of Compaq values at any of these qualified retailers: **ABC Warehouse,** American Appliance, American TV, **Best Buy,** Big City Express, **Brandsmart USA,** Campo Electronics, **Circuit City,** CompUSA, CompUSA Direct, Computer City, Computer Discount Warehouse, Computer Town, Conn's, DataVision, Fred Meyer, Fry's Electronics, Future Shop, the good guys!, **h.h. Gregg,** Insight, J&R Computer World, Micro Center, MicroWarehouse, Multiple Zones, Nationwide Computers & Electronics, **Nebraska Mega Mart,** Nobody Beats the Wiz, **Office Depot, OfficeMax,** PC Connection, PC Mall, PC Richard & Son, PC Warehouse, **RadioShack,** RCS Computer Experience, Sears, **Staples,** State Street Discount, Sun TV & Appliances, Inc., Tiger Direct, Tops Appliance City, T-Zone. **Visit a Compaq *Built For You Custom PC Center* at the select retailers highlighted above.**

COMPAQ
Better answers.℠

"KILLER BEES ARE COMING! DON'T RISK LEAVING THE HOUSE."

– Darryl Peck,
CEO of Outpost.com, the website designed for people who want computer products, but don't want to be stung by killer bees.

Killer bees recently made headlines when a Texas man was stung over 1,000 times. I thought about this one day and realized that I wouldn't want to be stung over 1,000 times. That's why I created Outpost.com. Now when our customers order hardware, software or peripherals by midnight, they'll be delivered the next morning. So they never have to step outside their homes–placing them in grave danger!

"Some of you might be thinking: 'But I have to leave the house at some point.' Let me tell you something: That's exactly what the bees want you to think."
– Darryl Peck

In 1957, 26 colonies of African killer bees escaped from a research apiary near Brazil. In 1990, they made their way to Texas. Recently, there have been reports of swarms in Los Angeles. (I used to love visiting Los Angeles.)

Africa is a great place to visit, as long as you're not being stung to death by bees.

When the colony is on the move, it seeks a new nest site. A small hole leading to a hollow space is what the swarm looks for. An opening 1/8 inch in diameter is large enough to provide an entrance. That's why we tell our manufacturers not to make products with openings bigger than 1/8 of an inch. Trust me, you don't want a computer delivered with a bunch of angry killer bees inside it. No, sir.

"My doctor says if I buy computer products on the internet from the safety of my own home, there is virtually no chance of being stung repeatedly by a swarm of killer bees."

So what can we do about this terrifying development? The killer bee looks almost exactly like its docile American cousin. It's tough to tell them apart. But if you notice a large swarm of bees stinging you over and over and over, that's a sign it could be killer bees.

There are some precautions you can take. To avoid attracting killer bees, wear light, not dark, clothing. Also, if you see a colony of angry bees, do not pick up the hive and start violently shaking it. But, in my opinion, the best thing to do is just stay home. Why risk it?

At Outpost.com we've got over 140,000 computer products to help keep you busy. I just wish we could've helped that man in Texas–the one who was stung over 1,000 times. I wouldn't want to be stung over 1,000 times.

Ask Darryl

Q: Darryl, what if when my order is delivered some killer bees sneak in when I open the door?

A: *Before you open the door, ask the delivery man if he sees any bees. If he says, "Yes," ask him if they look like killer bees.*

The computer products you want. Without the bee stings. Outpost.com™

AOL keyword: Outpost

©1998 Cyberian Outpost, Inc.

CONTRIBUTED BY CHRIS YURKO

Many Happy Returns?

You don't like the PC or CD-ROM you just got, but can you take it back?

YOU'RE DEEP INTO THE post-holiday blues, and you decide you hate the new PC or software you just bought. You'd rather spend the money you spent on the PC on that home renovation you've been putting off, a family trip, or a year's worth of fancy dinners without the kids. Maybe the software doesn't work or simply doesn't float your boat. What now?

Return the PC and you may get a refund or credit, but don't be surprised if you can't get all your money back. Some retail or mail-order outlets deduct as much as 20 percent from the purchase price of a new computer as a restocking fee. Opened software? Some will not take it back at all. And after 30 days, forget about it. (See "Sample Return Policies.")

In today's computer retail world — one of tight profit margins and plummeting prices — old consumer saws like "satisfaction guaranteed or your money back" do not apply. Policies on returning purchases may vary from vendor to vendor, but they all have one thing in common: They want to discourage you from doing it. If you say you're not satisfied, the seller wants to know why. Your answer will determine whether it takes the merchandise back.

"Manufacturers are becoming more stringent about their customer returns," said Tony Amico, a PC specialist and director of channel research with International Data in Framingham, Massachusetts. "The attitude is toward questioning."

That's right – returning PCs and software has gotten tougher.

PHOTOGRAPH: CHIP SIMONS

Do You Know Where Your Bubble Wrap Is?

Every return means profits lost to both the retailer and the manufacturer — especially when it comes to PCs. Processing returns costs money for shipping, testing, repackaging, and reselling the machines as used and refurbished equipment at discounted prices.

"It's just like if you take a car back after 30 days," said Sam Crowley, executive vice president of operations for CompUSA. "You can't sell it as a new car. It's got miles on it. It's worth less."

Vendors want equipment back in resalable condition. Return merchandise in an unopened, factory-sealed box, and you'll get little hassle. The retailer can turn around and resell it as new without shipping it back to the manufacturer for refurbishing.

As soon as you open the box, however, the value of the merchandise drops — it's the same as driving that new car off the lot. Most computer stores and catalog companies knock 15 to 20 percent off the amount they refund for what they call an open-box or restocking fee. That fee doesn't just help the seller recoup some of the loss incurred in the transaction; it's also a direct disincentive to you. Crowley said the restocking fee, in part, helps to encourage reluctant users to "figure out how to use the computer."

"Obviously, none of us wants returns," Crowley said. "In the real world, the number of defective computers is really very small (about 3 percent). What's usually happening when a customer returns a computer is that they're having

Sample Return Policies

Outlet: Best Buy

Contact Information: 800-373-3050, www.bestbuy.com
Hardware: Returns of nondefective merchandise within 14 days for refund or exchange; opened boxes subject to 15 percent restocking fee.
Software: Full refund on unopened software returned within 30 days. Opened software, if defective, may be exchanged for same title only.

Outlet: Circuit City

Contact Information: 800-251-2665, www.circuitcity.com
Hardware: Full refund on merchandise returned in unopened box within 14 days; opened boxes subject to 15 percent restocking fee.
Software: Refunds on unopened merchandise only; opened defective software may be exchanged for same title only.

Outlet: CompUSA

Contact Information: 888-267-8628, www.compusa.com
Hardware: Full refund on merchandise returned within 10 days; no refund on some peripherals and special orders. Returns with missing packing materials subject to 15 percent restocking fee.
Software: Refunds on unopened software within 30 days; opened software may be exchanged if returned within 10 days.

Outlet: Staples

Contact Information: 800-333-3330, www.staples.com
Hardware: Full refund on opened or unopened computers and printers if returned with all packaging within 14 days. Full refunds on other peripherals if returned within 30 days.
Software: Full refund if returned unopened within 30 days; opened software exchanged for exact title only.

Outlet: CDW Computer Centers

Contact Information: 800-840-4239, www.cdw.com
Hardware: Returns on nondefective equipment for credit, exchange, or refund within 30 days, subject to 15 percent restocking fee. Returns on defective computers and printers accepted within 30 days for repair or replacement only. Apple, AST, Compaq, Hewlett-Packard, and IBM equipment may be returned to CDW for repairs only – no refunds or exchanges.
Software: Refunds on returns with original packaging, opened or unopened, within 30 days.

difficulty getting the computer to do what they want it to do."

As software has become increasingly complex, says Crowley, customer frustrations with their new systems have become more common. CompUSA and other retail chains have responded by increasing technical support within their stores. "A returned computer for me represents a dissatisfied customer," he says, "and I don't want that."

Believe it or not, you're more likely to get a refund if your computer is working properly. Defective equipment is generally covered by warranties and accepted only for repairs or replacement. This is true even if repairing the machine requires that you send it back to the company at your own expense. Shipping and handling fees are almost never refundable for merchandise that you purchased through mail order, catalog, or Web companies, unless the equipment is D.O.A. on your doorstep.

Maximize Your Returns

To increase the chance that the company will take your stuff back, be sure to follow these suggestions:

• **Read the return policy.** It should be posted prominently in stores. Request a copy. If the wording's not clear, ask a sales clerk to explain — before you buy. Telephone operators at mail order or catalog companies generally won't explain their return policies unless you ask. So ask.

• **Read the specs.** A few companies accept "incompatible equipment" as a reasonable excuse for a return; most, however, do not, particularly on software. So before your kids ravage the shrink-wrap on that new CD-ROM, check the system requirements to make sure you've got a match.

• **Count the days.** Some companies give buyers only 14 days to return merchandise. None that I found give more than 30.

• **Think twice before opening.** As soon as you do, restocking fees come into play.

• **Save everything.** Receipts, as always, dated proof of purchase, and so on. But when it comes to computers, you should save every last peanut in the box, as well as the styrofoam, plastic, instruction manuals, software, cords, accessories, even blank registration and warranty cards. Oh, and, of course, the box.

Save every last peanut in the box, as well as the styrofoam, plastic, instruction manuals, software, cords, accessories, even blank registration and warranty cards. Oh, and the box.

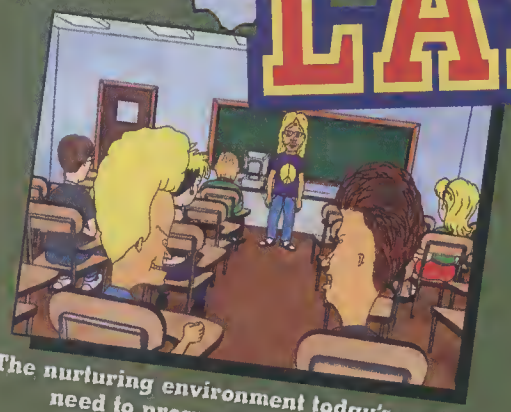
• **Call ahead.** If you bought a computer through the mail or the Web, you will have to call the company for a "returned materials authorization" number, or RMA, before sending it back. Otherwise, the merchandise will not be accepted.

Satisfaction Guaranteed?

The best way to be sure you're not going to return the PC or software title you recently bought is, of course, to make sure you really want it in the first place. Double-check your system specs and system requirements when buying software, and be sure everyone in the family who's going to use the PC has a say in the kind you bring home. That way you can avoid the post-holiday return-to-vendor blues.

Chris Yurko *is a newspaper editor and freelance writer who lives in Amherst, Massachusetts. E-mail him at chrisyurko@aol.com.*

LAMBDUH LAMBDUH LAMBDUH



The nurturing environment today's youth need to prosper academically!

Express yourself through art, literature or music!

Welcome Pledges. Your Fraternity Brothers, Beavis & Butt-Head, are waiting for you. Hit the **DO U campus** and see the world through their eyes as TV's favorite morons go totally collegiate. They'll attempt to do the impossible (well, for them anyway): score with the co-eds! **Same look and feel as the original TV series,** with thousands of lines of hilarious new dialogue.

BEAVIS AND BUTT-HEAD: DO U.

Whoa, check it out!

Beavis and Butt-head are everywhere! On the PC golf course in "Bunghole In One", on PlayStation® game console with "Get Big in Hollywood", and now ready to go wherever you go on Nintendo®Game Boy®!

Beavis & Butt-head ™ DO U © 1996 MTV Networks. All Rights Reserved "MTV Music Television", "Beavis & Butt-head" and all related logos, titles Distributed by GT Interactive Software Corp. GT and the GT Logo are trademarks of GT Interactive Software. Created by The Illusions Gaming Entertainment Inc. Nintendo, Game Boy and the official seals are registered trademarks of Nintendo of America Inc.© 1989 Nintendo of America.

and characters are Company under license Microsoft® and Windo

Interact with interesting and dynamic people in intellectually stimulating environments!

Brand new lines of hilarious dialogue featuring the voice of Mike Judge, creator of Beavis and Butt-head!

Tackle life's many challenges!

MTV's BEAVIS AND BUTT-HEAD

CREATED BY MIKE JUDGE

DO U.

MORONS CUM LAUDE.

Available at your local retail store. Order direct at www.gtstore.com or call 1-800-610-GTIS

NEED A HINT? 1-900-CALL-2GT (225-5248)

$1.95 per minute. $1.85 for fax back maps. Must be 18 years or older or have parents permission to call. Touch tone phones only.

TEEN T CONTENT RATED BY ESRB

MTV MUSIC TELEVISION

PC CD ROM

GT Interactive Software

www.gtgames.com

Trademarks owned and licensed for use by MTV Networks, a division of Viacom International Inc. Beavis & Butt-head created by Mike Judge. Software © 1998 GT Interactive Software Corp. Published and sublicensed from MTV Networks, a division of Viacom International Inc. PlayStation and the PlayStation logos are registered trademarks of Sony Computer Corporation. All other trademarks are property of their respective companies.

Site Prep The Watson family – Nate, Julie, Bruce, and Elena – get ready to build their home on the Web.

Honey, I Digit

THE HARDEST THING ABOUT making a family Web site may be explaining to your kids and doubting spouse why you're doing it in the first place. Fortunately, my daughter Elena, all of six years old, had heard of something called the Internet and thought having her picture on it would be "cool." So we set out on a journey. We had been to the Rockies. We had been to both coasts. Now we began packing to send our family into cyberspace.

A week later — a frustrating, puzzling, exhilarating, and, in the end, fun and rewarding week later — we had our own Web site, complete with pictures that family members all across the country could see. That first afternoon, my sister in Cincinnati e-mailed to say she loved the photos of Nate and Elena and their artwork. My brother in San Diego logged on later. The kids' grandparents in Maine and Arizona logged on to see our "Home, Sweet Home Page." For all I know, total strangers in Tasmania, child art collectors in Paris, and unicorn lovers in Kansas have admired my digitized family.

Four days in the life of a family Web site builder

In the end, it was a worthwhile trip any parent can accomplish on snippets of time stolen during the week (the project took only a few hours total). But check out my day-by-day travelogue — at times it can seem like a very long week.

By Bruce Watson

ized the kids

DAY 1: PACKING

Task: Preparation

Tools: Photos and drawings, scanner, a plan

Since most Internet service providers (ISPs) offer 2 to 10MB of space for personal use, your family Web site can contain a lot. You can include photos, sound clips, and scanned images of kids' artistic still lifes and landscapes with lollipop trees. When I started thinking about our site, the possibilities seemed endless. But I didn't want to make our Web home as cluttered as our real home. So before bothering with hardware and software, I sorted through the daily wares of our lives.

First, I gathered old photo albums. I had seen other family sites and knew the Web demanded a certain type of snapshot. Close-up, high-contrast photos reproduce best. (Group shots always end up looking like a yearbook photo of the high school Spanish club.)

I chose prized pictures of my children holding flowers, caught in the act, or just being their goofy selves. I added snapshots of my wife running a marathon and us arm-in-arm in the kitchen. Ours would be a small site, but it would be us.

I chose pictures of my children holding flowers, caught in the act, or just being their goofy selves.

To capture my family in all its quirkiness in only a few megabytes, I also dug up some old art postcards and downloaded quirky photos from the Web — General Sherman, American Gothic, a Vermeer painting. Finally, I raided the art gallery on our refrigerator door. I chose one drawing by each precocious Picasso.

I could have paid a copy shop to scan the photos, but instead I borrowed a scanner. It took me a half-hour to figure out dithering, cropping, and sizing, but once I got started, I turned my family into bits and bytes in about 90 minutes (see "How to Digitize the Kids"). My art was ready.

I chose to make my site simple. I drew a schematic of rectangles connected by lines. Our Home Page would be linked to one page for each of us and to a final Good-bye page featuring a photo of Nate giggling. Pretty basic, but if I wanted to add vacations, grandparents, or pets, I could always make more pages later.

To finish packing, I searched the Web for sites related to our offbeat interests — unicorns for Elena, motorcycles for Nate, running for my wife, my own pantheon of authors. I copied each URL to be linked later.

DAY 2: PUTTING IT TOGETHER

Task: Building the pages

Tools: Web publishing software, a sense of style, an ability to ask directions

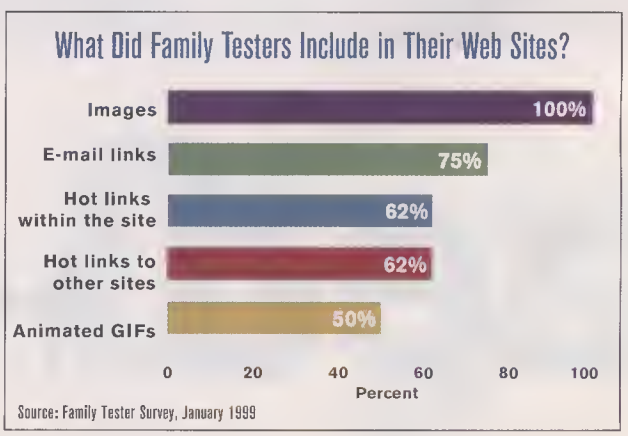
I decided to build our site using a simple program I already had — Print Shop Deluxe 6.0 (see this month's Software Reviews). Print Shop Deluxe isn't just for Web site building — it's a com-

How to Digitize the Kids

Images on the World Wide Web come in two file flavors: GIF for drawings and simple animations, and JPEG for photos. The key to preparing images for the Web is to make sure they're not too big – the bigger they are, the more room they take up and the longer they take to download.

A good basic rule for Web images is this: Scan images for your Web pages at no more than 70 dots per inch, and crop them to feature only the good parts (you'll want them to be around 10KB in size).

If you don't own a scanner or digital camera and can't borrow one, most copy shops will scan images for you at about $1 apiece.



PHOTOGRAPHS ROBERT TORLI

How to Choose a Host

If you're starting from the very beginning – that is, you don't have a connection to the Internet yet – look for an Internet service provider (ISP) that gives you at least 5MB of free space with your account. Ask about the type of software you should use to build your pages: All ISPs should let you post any pages you build, but some don't support certain Web page features, and some are harder to use with particular Web page builders. If you're on America Online, you get 10MB for your own Web site and a bunch of tools for helping you build simple pages.

If you want to get your feet wet building a family Web page, you can stop by one of the all-in-one, tools-and-hosting sites on the Web (see "Stake Your Claim," October *FamilyPC*). These sites can give you lots of ideas about what families are posting to their pages, and you don't need a separate Web page builder like FrontPage 98 or Print Shop Deluxe.

- GeoCities (www.geocities.com)
- Homestead (www.homestead.com)
- Tripod (www.tripod.com)
- Xoom (www.xoom.com)

plete desktop publishing program with a Web Site Designer feature that let me build our home page in just half an hour. Ultimately, Print Shop's capabilities are meant for designing only the simplest Web pages, and I quickly outgrew them. But the experience gave me the confidence I needed to forge on.

Print Shop's buttons instantly insert headlines, text, graphics, photos, or links. Once you insert an item, you can drag it anywhere on the page. Clicking on the Headline button, I typed "Home, Sweet Home Page," chose a font style, dropped the title on the page, and hit a button to center it.

Next, I searched through background wallpaper that looked like it belonged in a Parisian hotel or a pediatrician's office. Finally, I found a swirling blue pattern I liked and added it, along with an assortment of graphics and links to other pages. I moved on to page 2 — but took a disastrous wrong turn.

Now, I'm not the kind of guy who asks for directions — not from strangers and certainly not from software manuals. I just go. So in opening my second page — the one for Nate — I didn't know I had to link it to the first before I started. Instead, I began a whole new file. I had made Nate's page and was working with Elena on hers when I noticed three roads diverging. There was no link between these pages and never would be. This forced me to backtrack, spending an hour copying the kids' pages, piece by piece, and linking them to Home, Sweet Home Page. (Perhaps asking directions isn't such a bad thing after all.)

Back on track again, I fetched Elena and had her pick out wallpaper. She chose a pumpkin design. I imported her photo and then asked her some questions. Age? Favorite foods? What she wanted to be when she grew up? Below her answers, I inserted her best drawings. She gave me an "artist's statement" explaining her drawing of the "Jewel Unicorn" and went off to bed.

Once I got the hang of it, things went pretty quickly. The last two pages took just 15 minutes each. Print Shop allows you to preview your site so you can see how it'll look on the Web, and you can try out the links.

Michelangelo spent four years painting the Sistine Chapel, and only a few thousand tourists see it each day. But after two evenings, my daughter's unicorn was about to be seen by Web tourists around the world. I just had to figure out how to upload the file. I thought it would be simple but ran into a few unwelcome surprises.

DAY 3: POSTING

Task: Posting your site.

Tools: Web publishing software, a sense of limits, perseverance, your ISP's help-line phone number

Print Shop Deluxe was very simple, and I had my Home, Sweet Home site finished and ready to post. Yet the next afternoon, when I compared my pages to others on the Web, they seemed, well…homemade. Where were the glitzy graphics? Where were the flashing extras that made some family Web pages feel like the Las Vegas Strip? Didn't my family deserve a hit counter, a scrolling banner, a showy marquee?

To get them, I turned to a dedicated Web page builder: Microsoft's FrontPage 98. This program is a quantum leap beyond Print Shop in both possibility and complexity. After translating its baffling vocabulary — form fields, root Webs, validation scripts — I managed to import my simple site and add a few doodads. Then I prepared to launch my site onto the Web. But I was about to learn the most vital truth of Web design — a truth borne out by the family testers who rated the program for *FamilyPC* (see FamilyTested Web Site Builders).

'm not the kind of guy who asks for directions – not from strangers and certainly not from manuals.

The simple truth is that posting your site can be the hardest and most frustrating part of building a family Web site. I called my local ISP and got its FTP address and other specifics I needed. Then I entered them and hit Publish. We'd be on the Web in minutes, I thought. But for the next 2 hours, despite advice from all kinds of people at tech support and online help, our site was stuck on my computer.

I had learned to ask for directions in cyberspace, but now I learned that you can't always trust directions from strangers. Technical support at my ISP said that updating my site would be easy. Just hit Publish, and the new site would overwrite the old. But there were many forks in the road.

I tried again. And again I called tech support. Perhaps my new site exceeded the server's 2MB space limit. I cut the amount I was attempting to upload. Still it would not upload. So I had my ISP delete my original site so I could step back and post our simple site and be done with it for now. That's where I left off, and you can drop by www.javanet.com/~bwatson for a virtual visit sometime.

Where were the glitzy graphics? Didn't my family deserve a hit counter, a scrolling banner, a marquee?

First FrontPage would not take a password it forced me to enter. Then the folks at my ISP told me they couldn't post FrontPage sites — at least not sites that had scrolling script, which, of course, mine had. And on and on it went.

So I went back to square one: I published my old plain site using Print Shop Deluxe. It was an easy upload, done in 20 minutes without a glitch. Just after finishing, I logged onto my site, and there we were — my family on the Web. A few links didn't function properly (but then, neither did my children at times). I'd just correct them when I uploaded my new, improved site the next day.

DAY 4: FINE-TUNING AND UPDATING

Task: Adding new pages

Tools: Web publishing program, a sense of limits (again), skepticism about directions

When I set out to build a family Web site, I envisioned not just making a site but perpetually updating it. I would add photos and drawings to keep my far-flung family up-to-speed.

Epilogue

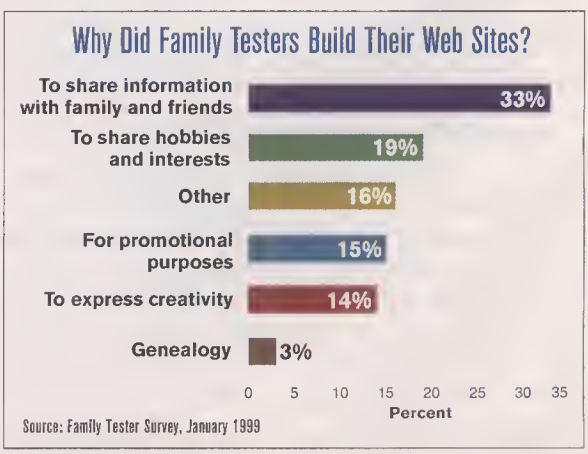
If your family wants to follow the trail we blazed and get onto the Web, I suggest you look at it this way: The journey into cyberspace is like an automobile trip in the 1920s, when cars were just beginning to own the road. The ride starts out exhilarating, but the trip is interrupted by inexplicable breakdowns, dead ends, and repairs you have to do yourself. Seeing the trip through takes patience, a love of adventure, and a sense of humor. Same goes for Web site building in the 1990s.

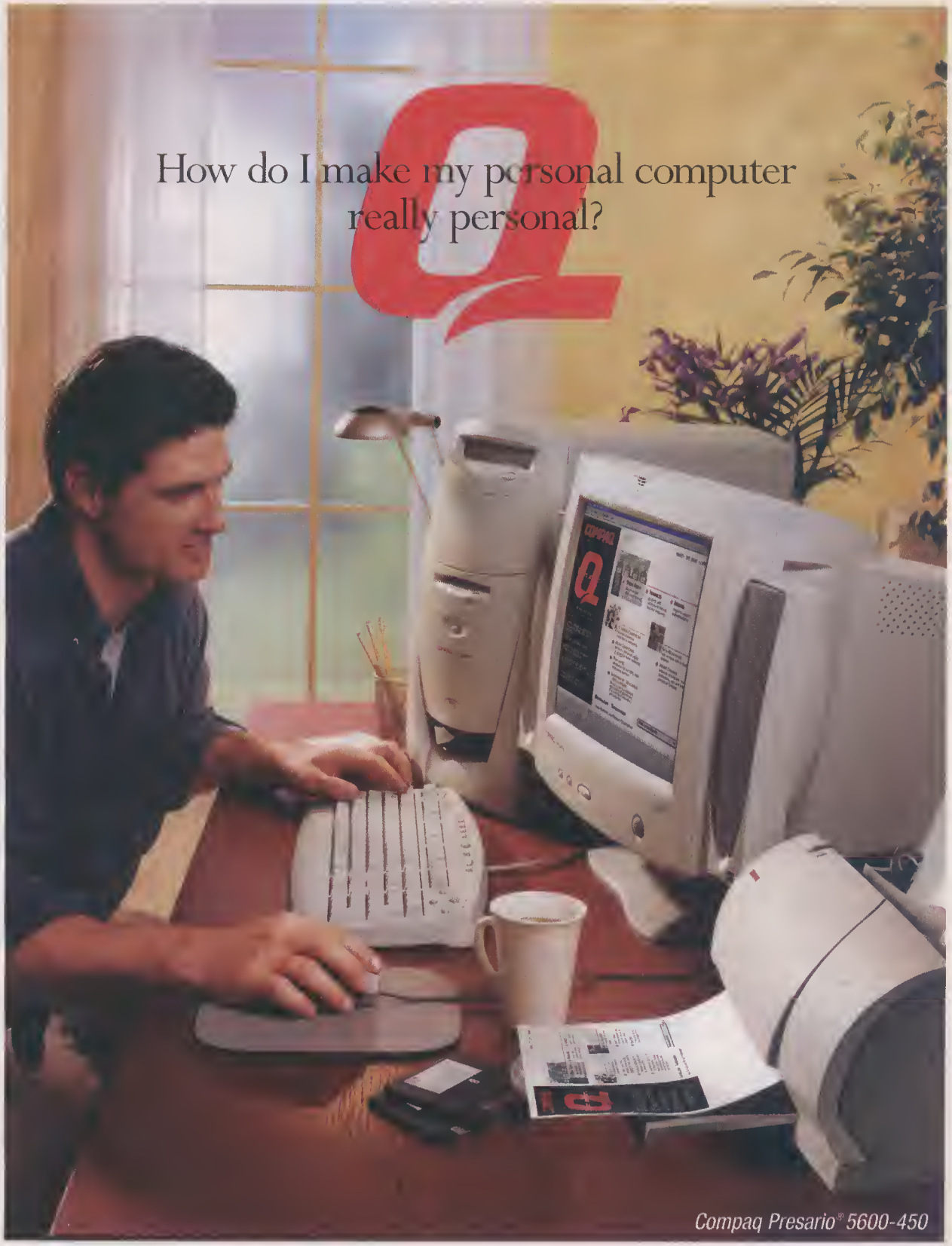
Bruce Watson *is a journalist in western Massachusetts. E-mail him at bwatson@crocker.com.*

Here's Why I Digitized the Kids

5 reasons to build a family Web site

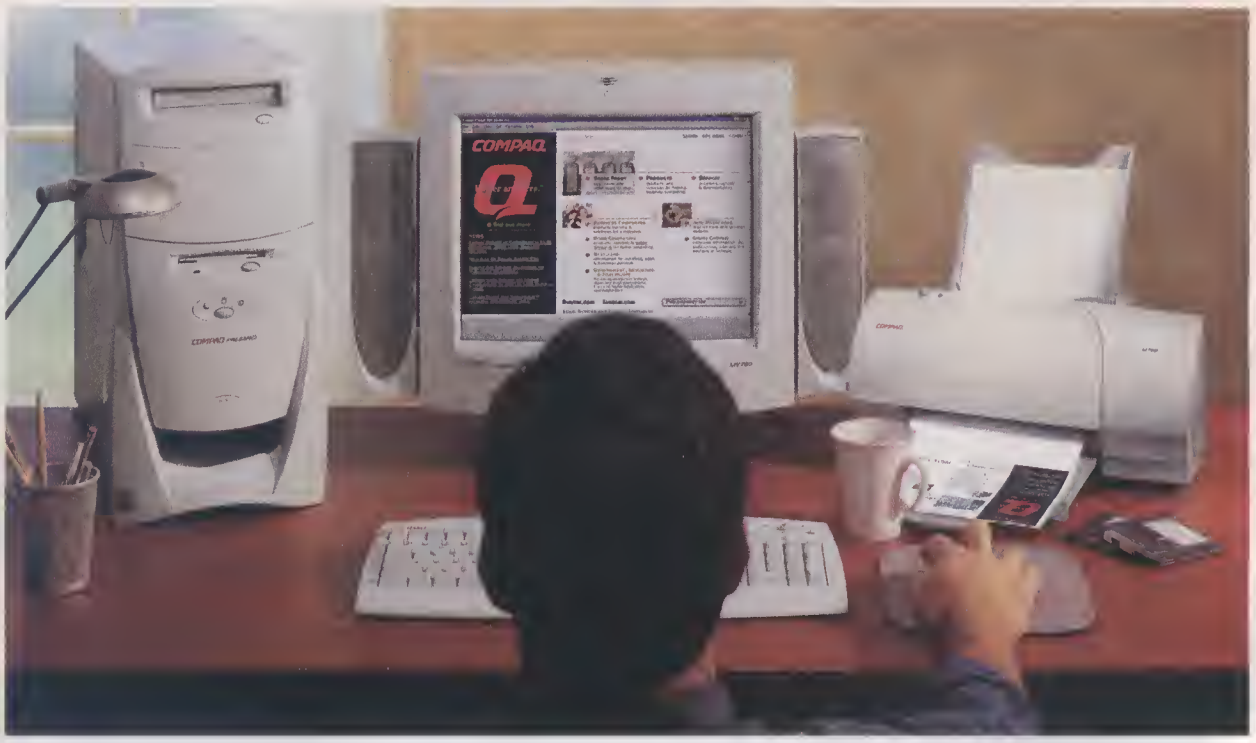
1. It's a cool way to keep distant family members up-to-date. Your in-laws in Tucson or Tallahassee can see your kids' art more easily on the Web than on your refrigerator door.
2. It makes you pay close attention to your family – who they are and what they love.
3. Millions of families are on the Web already. Isn't yours just as charming?
4. It's a great way to show your kids that even a parent can embrace the future.
5. Until you do it, the Web will contain every topic imaginable except your family.





intel inside
pentium® II

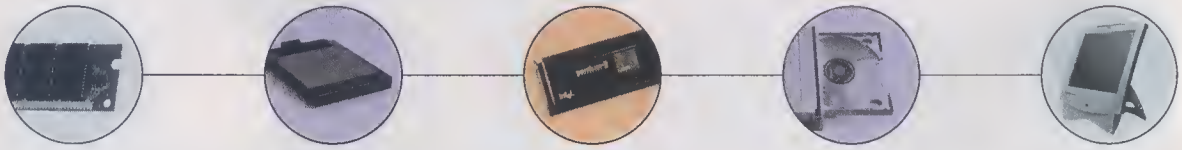
COMPAQ



Easy. Have Compaq build one for you.

Nobody knows what your computer needs are as well as you do. So shouldn't you be the one to decide what goes into yours? When you order these Presario Internet PCs you're in the driver's seat. You choose how much memory you want, hard drive size, whether you want a CD-ROM drive or DVD, advanced graphics, video memory, even the type of monitor you want. And you don't need a degree in computer engineering to build the computer that best suits your needs — we'll build it for you. And if you're not sure what features are best for you, we'll help you decide. Just call Compaq, visit our website, or stop by a Compaq *Built For You Custom PC Center* at select retailers. **Bring the world's best-selling computer home today.**

Here are some of the features we can personalize for you:



Memory

Speed up performance by choosing from 64 MB to a whopping 384 MB of Synchronous DRAM.

Hard Drive Size

Whether you're writing the great American novel or just surfing the Net, we've got the hard drive size that's right for you.

Processor Speed

You can choose from the latest Intel® Pentium® II Processors, including the new 450 MHz.

CD-ROM/DVD

A built-in Zip drive, CD-ROM, or DVD drive is the perfect way to accessorize and get the most from your Presario PC.

Monitor/Display

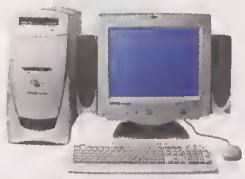
All our monitors assure that your applications will be displayed boldly and vividly.

intel inside
pentium® II processor

All prices shown are Compaq Direct selling price after applicable rebate. Prices shown do not include applicable sales tax and shipping. Products and prices valid in U.S. only. Actual retail price may vary. Specifications and prices are subject to change or cancellation without notice. Not all Compaq Presario models available in all retail stores. ***50 free hours of Internet access is offered when Compaq Easy Internet Access is chosen from Compaq Internet Setup. The 50 free hours must be used over a 30-day period from initial setup. A valid credit card is required to initiate service, although no charges will be incurred until the 50-hour trial has expired. **$100 mail-in rebate from Compaq upon activation of this free trial of Compaq Easy Internet Access. Rebate offer valid only in the USA and expires 4/30/99. See rebate coupon included with product for additional terms and conditions.** [1]For hard drives, GB = billion bytes. [2]ITU v.90 modems are designed only to allow faster downloads from K56flex or v.90 compliant digital sources. Maximum achievable download transmission rates are currently unknown, may not reach 56 kilobits per second (Kbps), and will vary with line conditions. [3]24X Max CD-ROM data transfer rates may vary from 1500 to 3600Kbps. [4]32X Max CD-ROM data transfer rates may vary from 1800 to 4800Kbps.

COMPAQ

Here are just a few of the hundreds of possible combinations:



(Shown with Presario MV700 Monitor)

Compaq Presario 5600i-450

$3,099
-$100 mail-in rebate**

$2,999

Base price includes:
- Intel® Pentium® II Processor, 450 MHz
- 16.8 GB Ultra DMA Hard Drive[1]
- 5X DVD-ROM Drive[5]
- 192 MB SyncDRAM expandable to 384 MB
- 1.5Mbps Digital DSL Modem (G.Lite/56K V.90)[6]
- Digital Creativity Imaging Center w/1394
- Diamond Viper 550 AGP w/16 MB SDRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Premium Speakers w/Subwoofer
- New! Iomega Zip Built-In™ Drive
- Microsoft® Office 97 SBE v.2.0
- Microsoft Windows®98
- Compaq V910 19" Monitor (18.0" VIA)

Personalize it by choosing:
- 256 MB SyncDRAM: Add $100
- Compaq IJ900 Color Inkjet Printer: Add $249[99]

(Shown with Presario MV700 Monitor)

Compaq Presario 5600i-450

$2,599
-$100 mail-in rebate**

$2,499

Base price includes:
- Intel Pentium II Processor, 450 MHz
- 16.8 GB Ultra DMA Hard Drive[1]
- 5X DVD-ROM Drive[5]
- 128 MB SyncDRAM expandable to 384 MB
- 1.5Mbps Digital DSL Modem (G.Lite/56K V.90)[6]
- Digital Creativity Imaging Center w/1394
- Diamond Viper 550 AGP w/16 MB SDRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Speakers
- New! Iomega Zip Built-In™ Drive
- Microsoft Featured Home Collection
- Microsoft Windows98
- Compaq V720 17" Monitor (15.9" VIA)

Personalize it by choosing:
- Compaq V910 19" Monitor (18.0" VIA): Add $170
- JBL Pro Premium Speakers w/Subwoofer: Add $69
- Compaq IJ700 Color Inkjet Printer: Add $179[99]

(Shown with Presario MV700 Monitor)

Compaq Presario 5600i-450

$2,099
-$100 mail-in rebate**

$1,999

Base price includes:
- Intel Pentium II Processor, 450 MHz
- 10.0 GB Ultra DMA Hard Drive[1]
- 32X Max CD-ROM Drive[4]
- 128 MB SyncDRAM expandable to 384 MB
- 56K ITU v.90 Modem[2]
- 2X AGP Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Speakers
- New! Iomega Zip Built-In™ Drive
- Microsoft Featured Home Collection
- Microsoft Windows98
- Compaq V720 17" Monitor (15.9" VIA)

Personalize it by choosing:
- 13.5 GB Hard Drive:[1] Add $50
- Diamond Viper 550 AGP w/16 MB SDRAM: Add $50
- 5X DVD-ROM Drive:[5] Add $100

Compaq Presario 5600-400

$2,099
-$100 mail-in rebate**

$1,999

Base price includes:
- Intel Pentium II Processor, 400 MHz
- 10.0 GB Ultra DMA Hard Drive[1]
- 32X Max CD-ROM Drive[4]
- 64 MB SyncDRAM expandable to 384 MB
- 56K ITU v.90 Modem[2]
- 2X AGP Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Speakers
- New! Iomega Zip Built-In™ Drive
- Microsoft Office 97 SBE v.2.0
- Microsoft Windows98
- Compaq V910 19" Monitor (18.0" VIA)

Personalize it by choosing:
- 128 MB SyncDRAM: Add $100
- Digital Creativity Imaging Center: Add $49
- 1.5Mbps Digital DSL Modem (G.Lite/56K V.90):[6] Add $99

Compaq Presario 5600-400

$1,899
-$100 mail-in rebate**

$1,799

Base price includes:
- Intel Pentium II Processor, 400 MHz
- 10.0 GB Ultra DMA Hard Drive[1]
- 5X DVD-ROM Drive[5]
- 64 MB SyncDRAM expandable to 384 MB
- 56K ITU v.90 Modem[2]
- 2X AGP Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Speakers
- New! Iomega Zip Built-In™ Drive
- Microsoft Featured Home Collection
- Microsoft Windows98
- Compaq V720 17" Monitor (15.9" VIA)

Personalize it by choosing:
- 128 MB SyncDRAM: Add $100
- Compaq V910 19" Monitor (18.0" VIA): Add $170
- Diamond Viper 550 AGP w/16 MB SDRAM: Add $50

Compaq Presario 5600-350

$1,599
-$100 mail-in rebate**

$1,499

Base price includes:
- Intel Pentium II Processor, 350 MHz
- 8.0 GB Ultra DMA Hard Drive[1]
- 5X DVD-ROM Drive[5]
- 64 MB SyncDRAM expandable to 384 MB
- 56K ITU v.90 Modem[2]
- 2X AGP Graphics w/8 MB SGRAM
- 10 Mbps Ethernet port, Cable Modem Ready
- JBL Pro Speakers
- New! Iomega Zip Built-In™ Drive
- Microsoft Featured Home Collection
- Microsoft Windows98
- Compaq V720 17" Monitor (15.9" VIA)

Personalize it by choosing:
- 128 MB SyncDRAM: Add $100
- 13.5 GB Hard Drive:[1] Add $150
- Compaq IJ200 Color Inkjet Printer: Add $129[99]

Buy one of these computers and get **50 free hours** on the Net*. Plus, get a **$100 rebate** on these select Compaq Presario minitower, desktop, or notebook PCs when you sign up for this Compaq Easy Internet Access free trial.**

Buy direct from Compaq, or purchase yours at your favorite retailer.
Visit us at **www.compaq.com/athome** or call **1-800-376-0955.**

Visit a Compaq *Built For You Custom PC Center* at select locations of these retailers:

ABC Warehouse, Best Buy, Brandsmart USA, Circuit City, h.h. Gregg, Nebraska Mega Mart, Office Depot, OfficeMax, RadioShack, Staples.

Take advantage of Compaq values at any of these qualified retailers:

ABC Warehouse, American Appliance, American TV, Best Buy, Big City Express, Brandsmart USA, Campo Electronics, Circuit City, CompUSA, CompUSA Direct, Computer City, Computer Discount Warehouse, Computer Town, Conn's, DataVision, Fred Meyer, Fry's Electronics, Future Shop, the good guys!, h.h. Gregg, Insight, J&R Computer World, Micro Center, MicroWarehouse, Multiple Zones, Nationwide Computers & Electronics, Nebraska Mega Mart, Nobody Beats the Wiz, Office Depot, OfficeMax, PC Connection, PC Mall, PC Richard & Son, PC Warehouse, RadioShack, RCS Computer Experience, Sears, Staples, State Street Discount, Sun TV & Appliances, Inc., Tiger Direct, Tops Appliance City, T-Zone.

Compaq Presario 1800-266

$2,199
-$100 mail-in rebate**

$2,099

Base price includes:
- Intel® Pentium® II Processor, 266 MHz
- 12.1" TFT Active Matrix Display
- 64 MB SyncDRAM expandable to 160 MB
- 4.0 GB Ultra DMA Hard Drive[1]
- 24X Max CD-ROM Drive[3]
- 56K ITU v.90 Modem[2]
- Smart Li-Ion Battery
- 512 KB L2 Pipeline Burst Cache
- 256-bit Accelerated Graphics w/2.5 MB VRAM
- Microsoft® Featured Home Collection
- Microsoft Windows®98

Personalize it by choosing:
- 96 MB SyncDRAM: Add $100
- 6.4 GB Hard Drive:[1] Add $200
- Brief Carrying Case: Add $119

Compaq Presario 1800-300

$2,599
-$100 mail-in rebate**

$2,499

Base price includes:
- Intel Pentium II Processor, 300 MHz
- 12.1" TFT Active Matrix Display
- 64 MB SyncDRAM expandable to 160 MB
- 4.0 GB Ultra DMA Hard Drive[1]
- 2nd-Generation DVD-RDM Drive[6]
- 56K ITU v.90 Modem[2]
- Smart Li-Ion Battery
- 512 KB L2 Pipeline Burst Cache
- 256-bit Accelerated Graphics w/2.5 MB VRAM
- Microsoft Featured Home Collection
- Microsoft Windows98

Personalize it by choosing:
- 96 MB SyncDRAM: Add $100
- 6.4 GB Hard Drive:[1] Add $200
- Brief Carrying Case: Add $119

Compaq Presario 1800-300

$3,199
-$100 mail-in rebate**

$3,099

Base price includes:
- Intel Pentium II Processor, 300 MHz
- 13.3" TFT Active Matrix Display
- 96 MB SyncDRAM expandable to 160 MB
- 6.4 GB Ultra DMA Hard Drive[1]
- 2nd-Generation DVD-RDM Drive[6]
- 56K ITU v.90 Modem[2]
- Smart Li-Ion Battery
- 512 KB L2 Pipeline Burst Cache
- 256-bit Accelerated Graphics w/2.5 MB VRAM
- Microsoft Office 97 Small Business Edition
- Microsoft Windows98

Personalize it by choosing:
- 160 MB SyncDRAM: Add $250
- Executive Leather Carrying Case: Add $200
- Port Replicator: Add $100

More value from Compaq!

All Compaq Presario 5600 Series Custom "Built For You" PCs now include an Iomega Zip Built-In™ Drive. So don't delay — call today or visit your nearest participating Compaq "Built For You" retailer. (Presario 5170 shown.)

Iomega Zip Built-In™ Drive

- The standard in 100 MB portable storage
- One Zip disk equals the capacity of 70 floppies
- Reliable backup of your important stuff
- Easily carry files between work and home
- Plus: Buy a Zip 10-pak for only $99 — so everyone in the family can store their own stuff

Compaq IJ200

$129.99

- Single-head thermal inkjet technology
- Up to 600 x 600 DPI resolution
- Sharp text and sharp color prints
- Print Speeds:
  Up to 3 ½ pages per minute black
  Up to 1 ½ pages per minute color
- Paper tray holds up to 30 sheets

Every Compaq product comes with a standard one-year limited warranty[7] and the assurance of our Extra Mile Service, the most comprehensive and flexible PC support available. You'll have access to fast, accurate, 7x24 technical support via the phone or Web.

EXTRA MILE SERVICE

Buy direct from Compaq, or purchase yours at your favorite retailer.
Visit us at **www.compaq.com/athome** or call **1-800-376-0955.**

intel inside
pentium® II PROCESSOR

[5]The 5X DVD-ROM Drive transfer rate is up to 6,750 KB/s compared to 1,352 KB/s for 1X DVD-ROM Drives. [6]2nd-Generation DVD-ROM Drives run at a higher maximum transfer rate of up to 2.76 MB/s compared to 1st-Generation DVD-ROM Drives which run at a maximum transfer rate of up to 1.348 MB/s. [7]One year parts and labor. Labor for desktop systems is carry-in service with on-site service during the first 90 days of ownership. Labor for notebook systems is pick-up service. [8]The 1.5Mbps Digital DSL Modem (G.Lite/56K V.90) modem protocol is designed to allow faster downloads from G.Lite/56K V.90 compliant digital sources. Availability of services will vary by region and Internet Service Provider (ISP), and may differ from V.90 ISP services. Maximum achievable download transmission rates with G.Lite/56K V.90 are currently unknown, may not reach 1.5Mbps or 56Kbps, respectively, and will vary based on service provider, line conditions, and distance. Compaq is not liable for pictorial or typographical errors in this advertisement. Compaq, the Compaq Logo, and Presario registered in U.S. Patent and Trademark Office. Microsoft, MS, and Windows are registered trademarks of Microsoft Corporation. Intel, the Intel Inside Logo, and Pentium are registered trademarks of Intel Corporation. Product and company names mentioned herein may be trademarks and/or registered trademarks of other companies. **Call Compaq Monday-Friday 7:00am-11:00pm (CST), Saturday and Sunday 7:00am-7:00pm (CST).**
©1998 Compaq Computer Corporation. All rights reserved.

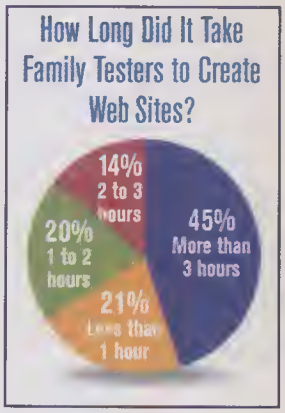
COMPAQ
Better answers.℠

FamilyTested Web Site Builders

BRUCE WATSON WAS NOT THE ONLY one spending weekend and evening time building a family Web site: We set 114 ambitious family testers loose on a set of Web site builders that ran the gamut from the full-featured $149 FrontPage 98 to the $50 Web Easy. In the end, there were some clear winners — FrontPage 98, PageMill 3.0, and WebExpress 3.0. These programs showed a mix of easy-to-use templates and site-enhancing features that let testers get started right away while leaving them plenty of room to grow.

Clearly, this combination of ease of use and power is tough to pull off — family testers rejected the low-end and simple-to-use Web Easy (saying they wanted a program with more features), yet they also rejected three out of five more full-featured programs for being too hard to use.

Family testers said that a combination of difficult-to-use tools, poor documentation, and a steep learning curve sure to stress time-strapped parents kept them from recommending more titles. They did point out, however, that at $149 FrontPage is a pretty hefty investment, and the more casual family Web page builder may want to check out a cheaper option that gives up a little in features or ease of use.



Microsoft FrontPage 98

Recommended

FAMILY TESTED 85

IN THE BATTLE to create the best Web design program, Microsoft has stolen center stage with FrontPage 98, our Top Rated Web site builder two years running. Our family testers said FrontPage offers the best of both worlds: It's easy to use, yet it's packed with power.

You build basic Web pages in FrontPage's Editor window in much the same way that you build a report in Microsoft Word. And just like Word, FrontPage lets you add graphics and animations.

Of course, the fancier you want to get, the more you have to learn. For example, to create multicolumn documents in FrontPage, you need to create tables. These work similarly to the tables you create in Word, but they can take a lot more tweaking to look just the way you want.

Fortunately, FrontPage offers lots of templates, grouped into 50 themes. The Citrus Punch theme, for example, contains fruity colors, like lemon, lime, and orange, and buttons shaped like juicy fruit. Other themes include Automotive, Leaves, and Straight Edge. With templates and themes, the basic structure and look of the site are already done, so you can spend your time doing the fun stuff, like scanning in photos of your kids at the beach.

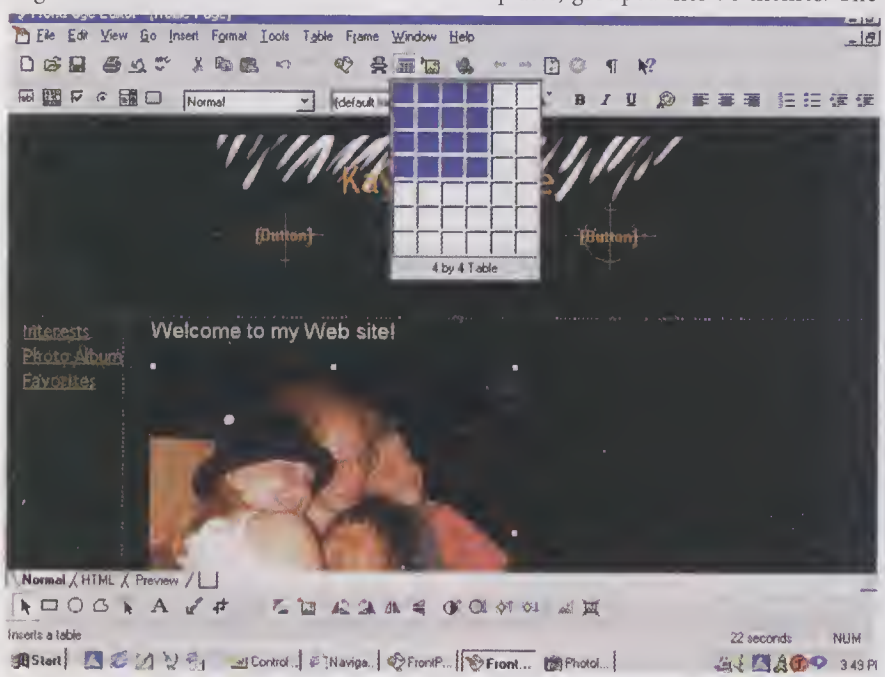
If you want to get fancy, FrontPage offers tools that make it simple to make text and graphics swoop or glide onto your page, or to add a hit counter.

When all your pages are complete, you turn to FrontPage 98's Explorer window, where you manage your site. By dragging boxes representing pages, you can easily rearrange your site. The corresponding links among the pages are automatically changed for you.

On the negative side, family testers found FrontPage's Navigation Bars, which let you move among the pages of your site, easy to create but awkward to modify. Also, a few testers had the same problem Bruce did — they had to make several calls to their ISPs to successfully publish their site. Finally, it would make for smoother operation, testers said, if the Explorer and Editor were integrated into a single window.

Aside from these shortcomings, FrontPage 98 is a standout program that will make your Web site stand out, too.

Microsoft, *800-426-9400, www.microsoft.com; Windows CD, $149.*



Full-Featured Microsoft FrontPage 98 works much like Word – a menu and taskbar at the top lets you pick and choose the items you want to include.

WebExpress 3.0

Recommended

THE BEST THING about WebExpress 3.0 is that you get most of the features and much of the ease of use of FrontPage 98, for half the money. The only drawback, said family testers, is that it takes a little more effort to get going with WebExpress's wizards, templates, and clip media. Once they got up and going, testers found they could add advanced Web page features like frames for designing pages, forms for gathering data from visitors to their pages, and image maps that let them create hot-link areas on pictures.

Best Feature: The price is right.

Biggest Drawback: Too few templates for families looking for a quick site.

MicroVision Development, *800-998-4555, www.mvd.com; Windows 95 CD, $69.95.*

Adobe PageMill 3.0

Recommended

WE FAMILY-TESTED only two Web page builders for Mac users — PageMill and Home Page. Family testers gave PageMill the nod over Home Page because of its simple-to-use templates, intuitive interface (especially if you're used to Adobe products like Photoshop or PhotoDeluxe), and excellent documentation. If you want a site with a little more glamour, PageMill lets you easily build tables (for making Web pages look more like printed ones), frames (for better navigation), forms (for collecting information), and even Java scripts (for things like visitor counters and tickers). PageMill comes with 10,000 pieces of clip media and a copy of Photoshop LE.

Best Feature: Ease of use, thanks to its fine interface and great documentation.

Biggest Drawback: If you don't start with a template, the process takes time.

Adobe, *800-888-6293, www.adobe.com; Mac and Windows CD, $99.*

Words of Wisdom from Testers in the Trenches

"Read the manual." *–Beth Vogelgesang, Crestwood, Kentucky*

"Don't be afraid to make mistakes." *–Mark Wilkins, Belington, West Virginia*

"It's not as hard as you think." *–Bruce Alexander, Warwick, Rhode Island*

"Always make backups." *–Robert Lombardo, Cranford, New Jersey*

"Study what others are doing." *–Don Doornbos, Chenango Forks, New York*

"Take your time. It may seem like it would be best to just put a Web page up regardless of how it looks, but it's a better idea to make your Web site look nice and have good content before you put it up." *–Ashley Richie, Scottsdale, Arizona*

"Consider it an ongoing process; don't expect to get everything exactly right immediately." *–Amy Black, Olive Branch, Mississippi*

Home Page 3.0

HOME PAGE 3.0 lets Mac and Windows 95 users build simple pages from 2500 pieces of clip art and 45 site templates, or build more complicated pages using frames, forms, and tables. Stick with the templates and clip art, and you can have a simple site up and running in less than an hour, testers said. However, the program's best feature — its simple integration with the database program FileMaker Pro — is important to only a small fraction of families building Web sites. The database integration lets people working from home build pages that sell items directly from a database they've already created, or allows families to collect information from people who fill out forms at their Web site.

Best Feature: Support for FileMaker Pro 4.0 databases and building forms.

Biggest Drawback: Its strengths appeal to a limited audience.

FileMaker, *800-544-8554, www.filemaker.com; Mac and Windows CD, $99.*

Visual Page 2.0

VISUAL PAGE 2.0 gives you a choice of two ways to work: You can lay out pages as if you were using a word processor to build a report (it has a nifty drag-and-drop text feature), or you can use the program as you would a more graphical desktop publisher. Visual Page has good site management tools, plus 12,000 pieces of clip media. The problem, said testers, is that while Visual Page is oozing with features, it offers no simple way to build a quick-and-easy site.

Best Feature: You can lay out Web pages the way you would use a word processor or publishing program.

Biggest Drawback: Tough learning curve and spotty documentation.

Symantec, *800-441-7234, www.symantec.com; Windows 95 CD, $99.95.*

Internet/Intranet Design Shop Gold 32 Bit

DESIGN SHOP GOLD is an unusual hybrid: It's a Web design program that also does a little desktop publishing (letters, calendars, cards, and more). In addition to the Web page tools common to other programs in this price range — tables, forms, and so on — you get an image editor and an animated GIF creator for building simple animations. Family testers said those who like to explore will find lots of power here; those who are looking for a program that's simple to navigate should look elsewhere.

Best Feature: It allows you to do more than build Web pages.

Biggest Drawback: Inadequate integration of components.

Boomerang Software, *617-489-3000, www.boomerangsoftware.com; Windows 95 CD, $99.*

Web Easy

FAMILY TESTER John Beaty of Lincoln, Nebraska, summed up Web Easy for all the testers who played with it: "It is very basic," he said. If all you want to do is post a few photos and some text on the Web, Web Easy may be all you need. It has more than 30 templates, plus 50,000 pieces of clip art. While testers found it rewarding to build a simple site in less than an hour, they soon found that they wanted to do more but were unable to.

Best Feature: Easiest Web page builder we tested.

Biggest Drawback: Limited options for creating, editing, and managing pages.

Ixla, *800-489-6704, www.ixla.com; Windows CD, $49.*

A Whole New Generation of Fun!

LEGO®

All New Software

Remember the fun you had with LEGO® bricks? Now, with our new generation of computer games, your children will experience the exciting new world of LEGO - a world that transforms the LEGO brick system into 3D virtual excitement.

With our creative games, your children's virtual building and competitive gaming skills will be challenged by fun and imaginative activities. All three games provide innovative fun for kids... Wouldn't you like to be a kid again?

LEGO media

www.lego.com

LEGO Loco
Ages 6+

LEGO Creator
Ages 8+

LEGO Chess
Ages 6+

PC CD-ROM Windows 95/98

Available at your favorite software or toy retailer, or call: 1-800-453-4652

Your kids were a streak
of color as they flew by.

But every detail will be crystal clear
when you print your own pictures.

TAKE PICTURES. FURTHER.™

The difference is KODAK digital.

KODAK Picture Card
Think of it as a reusable roll of digital film. The 8 MB card holds 25 to 120 images.

Immediate Color Display
Gives you an immediate preview of your pictures. Save the ones you like. Delete the ones you don't. Getting great pictures is as easy as that.

Megapixel Quality
Is a technical way of saying your pictures will have amazing detail and color.

KODAK Inkjet Photo Greeting Card Paper
Personalize holiday, birthday, and special greeting cards with your own photos. Works with all popular inkjet printers.

Simple Computer Connection
Hook the camera up to your computer so you can print your pictures or e-mail them to friends and family.

$499
Why wait to own the digital difference from KODAK? You can have it at this price from November 1.

For more information visit us on the web at **www.kodak.com/go/detail** or call **1-800-KODAK-22,** or stop by one of the following stores:

CIRCUIT CITY. THE QUIZ A CABLEVISION COMPANY J&R MUSIC WORLD COMPUTER WORLD THE CAMERA SHOP The Focus is on You! WOLF CAMERA COMPUSA THE COMPUTER SUPERSTORE

© Eastman Kodak Company, 1998. Kodak and Take Pictures. Further. are trademarks.

PC Perils

FamilyPC Computer Survival Guide

By Alfred Poor and Bob Ryan

Your family PC may be faster than a speeding bullet and able to crunch huge spreadsheets in a single bound, but it's also vulnerable to a host of perils that make kryptonite seem like Silly Putty. From nasty viruses to clumsy kids, you have lots to worry about as you try to keep your PC trouble-free.

Keep your family computer safe from ills, spills, and DLLs that go bump in the night

In the belief that knowledge is power, we present PC Perils, a guide to all the things that can go wrong with your family computer and what you can do about them — both before and after the fact. By following our easy, commonsense recommendations, you can ward off most of the dangers to your Windows or Mac machine and more easily handle the problems that do arise. You'll spend less time working on your computer and more time making it work for you. So don't be caught unprepared: Face your PC perils with the knowledge and tools you need to come out on top.

OH, NO... NOT ANOTHER VIRUS ATTACK!
Brooks

DR. BRAIN EXPERIMENT

FIG. A

[Gigantus Brainious]
a.k.a. your brain

1. Use brain.

Check out Dr. Brain on the Web at
www.drbrain.com

It takes more than mere muscle mass to whoop a robot in the all-new **Dr. Brain™ Thinking Games: IQ Adventure CD-ROM** game! Survival depends on outwitting, outsmarting, and outplaying over 10 unnatural species by solving hundreds of puzzles in 15 mind-bending missions. Go online with the AdventureLink™ feature and hook up with up to 4 players FREE* on the Internet. Then, challenge them to an all-out battle of the brains. **Are you smart enough to survive?**

[* Free access to AdventureLink™ requires Internet access. Player is responsible for all applicable Internet fees.]

#37

FIG. B

[Rocrus Muscilous]
a.k.a. Rock Monster

[Plantus Duelheadious]
a.k.a. Mutan

[Cyclopsius Metalious]
a.k.a. Eye Bot

2. Outsmart alien forces.

Also available.
Dr. Brain™ Thinking Games: Puzzle Madness

© 1998 Knowledge Adventure, Inc.

HOW TO DODGE A DISK CRASH

The Ultimate Protection

To ensure that you never lose data from a hard disk crash or any other cause, you should have a copy of the contents of your hard disk. Such a copy – called a *backup* – ensures that you can reconstitute your applications and data on new hardware in the event that your hard disk is fried. You can back up your hard disk to floppy disks, removable media disks such as Zip, Jaz, and Sparq, writable optical discs such as CD-R and CD-RW, or tape. Initially, you perform a full backup, which copies the entire contents of your hard disk. After that, you need only perform incremental backups, which copy the files that have changed since your last backup.

How often you perform a backup depends on how you use your computer. For general family use, once per week is enough. If you work at home, you need daily backups.

YOU TURN ON your Windows computer and get a message that it can't find a boot device. Your computer is telling you:

A. No more computer soccer for you.

B. Your hard drive is toast.

As this is an article about PC perils, you've probably guessed that the answer is B. (For a Mac user, the telltale sign is being greeted at start-up by a flashing question mark instead of a smiley face.) Of course, a hard disk crash is no laughing matter; you could lose months or years of work.

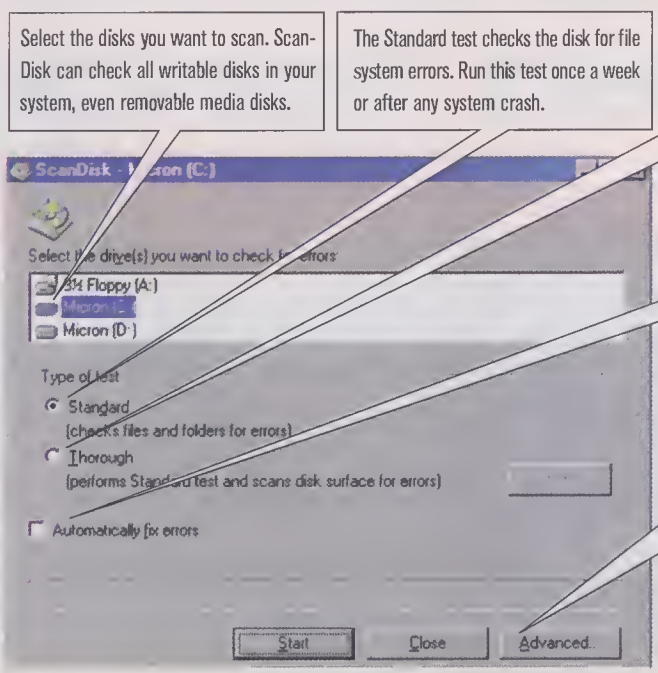
Although it is possible to recover from a hard disk crash — or at least to recover your files — the best way to deal with a crash is to prevent it. Your best preventive tool is a utility that scans your hard disk to detect and fix errors. Both Windows and the Mac come with disk scanning utilities (ScanDisk and Disk First Aid, respectively) that you can use to keep your hard disk error-free. You can also buy commercial disk utilities such as Norton Utilities (www.symantec.com) and Hard Drive Mechanic (www.uglyware.com), which not only scan your disk but also have powerful crash recovery features. Don't lose valuable data because you neglected your hard disk.

Speed Up Your Hard Disk

If programs and files don't load as fast as they used to, you need to defrag your hard disk. Your computer stores files on your hard disk in chunks. If you create and delete a lot of files, the chunks that make up an individual file may not be next to each other on the disk. If you have lots of files scattered in this way, your disk performance slows noticeably.

Defrag — short for *defragment* — is a process that finds the scattered chunks of files and orders them sequentially on your hard disk. Once that's done, the read mechanism barely has to move to load a file, so the load time decreases. The result is much faster system performance.

To defrag the hard disk of your Windows system, use the Disk Defragmenter utility found in the Programs/Accessories/System Tools folder. The Mac doesn't have a built-in defrag utility; you need a commercial one, such as the Speed Disk program that comes with Norton Utilities.



#1 in Customer Satisfaction Among the Largest National Internet Service Providers!**

Get on the Internet today with fast, reliable Microsoft® technology. Thousands of modems added every month, speeds of up to 56k, and Microsoft® Internet Explorer 4 software make MSN the fast choice for Internet access.

MSN Internet Access was designed exclusively for your Windows® 95 or 98-based PC. And MSN Internet Access is part of the network of Internet services from Microsoft at MSN.com—*THE* place to get stuff done on the Web.

Start right now, and get an entire month of unlimited MSN Internet Access — FREE*. Then if you agree that it's the best way to the Internet, do nothing to keep getting unlimited Internet access for just $19.95 a month. See offer details at registration.

Take MSN™ Internet Access for a spin and get a chance to WIN a 1999 Corvette™ plus hundreds of instant prizes!† Go to http://fastlane.msn.com today to see if you're a winner.

Life in the Fast Lane

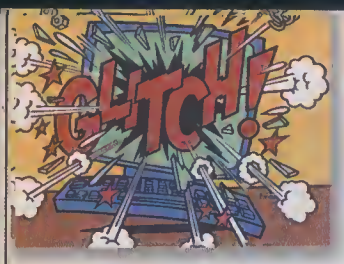
Try it all free'—it's easy to get started right now!
Click the icon on your Windows® 98 desktop
or call 1-800-211-2120, dept. 5790
for your free software.

MSN The Microsoft Network

Microsoft

*For users of the Windows 95 or higher operating systems only. Includes MSN Internet Access client access software only. One month free unlimited trial is available to new members of MSN Internet Access in the 50 United States and the District of Columbia only. A credit card is required. Local phone and/or long distance toll charges may apply. Local market network activity and capacity may affect access availability. Offer expires June 30, 1999. †No purchase necessary or online entry necessary. Participation is open to legal residents of the United States, at least 18 years of age or older at the time of entry. Void in Puerto Rico and where prohibited by law. Promotion begins at 12:01 a.m. (PT) on December 15, 1998 and ends at 11:59 p.m. (PT) on March 31, 1999. Call 1-800-467-8278 for official rules and complete details. **J.D. Power and Associates 1998 Syndicated National Internet Service Provider Customer Satisfaction Study (SM). Study based on responses from 5,234 households with Internet access. www.jdpower.com. © 1998 Microsoft Corporation and/or its suppliers. All rights reserved. Microsoft, MSN, the Microsoft Internet Explorer logo and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. © 1998 General Motors Corporation. Corvette is a registered trademark of General Motors Corporation, www.chevrolet.com/corvette.

Includes Microsoft® Internet Explorer 4.0



HOW TO PREVENT A VIRUS ATTACK

Antivirus Software

These antivirus utilities operate in the background to give you ongoing protection against computer viruses.

Dr. Solomon's Anti-Virus Deluxe; Network Associates, 888-377-6566, www.drsolomon.com; Windows CD, $59.95.

IBM Desktop Edition AntiVirus; IBM, 800-742-2493, www.ibm.com; Windows disk, $49.

McAfee VirusScan 4.0; Network Associates, 408-988-3832, www.nai.com; Windows 95/98 CD, $49.95.

Norton AntiVirus 5.0 for Windows; Symantec, 800-441-7234, www.symantec.com; Windows 95/98 and NT CD, $49.95.

Norton AntiVirus 5.0 for Macintosh; Symantec, 800-441-7234, www.symantec.com; Mac CD, $69.95.

PC-cillin 3.0; TouchStone Software, 800-531-0450, www.touchstonesoftware.com; Windows CD, $39.95.

Computer virus is a scary name for a nasty beast — a snippet of program code that can creep into your computer system and do anything from sending annoying messages to your screen to reformatting your hard disk, thus destroying its contents. If you use a floppy disk from an infected system or download an infected program from the Web, you put your data at risk.

As with real-life infections, the best approach to computer viruses is to avoid contracting them in the first place. An antivirus program acts like a disinfectant and detects and removes dangerous viruses from files before you run them. If you don't have an antivirus program, get one today.

If you do get a virus in your system, antivirus programs also have provisions to remove the infection. Be careful to follow the program's instructions to the letter, including booting your computer with a disk created on a computer that is known to be clear of infection.

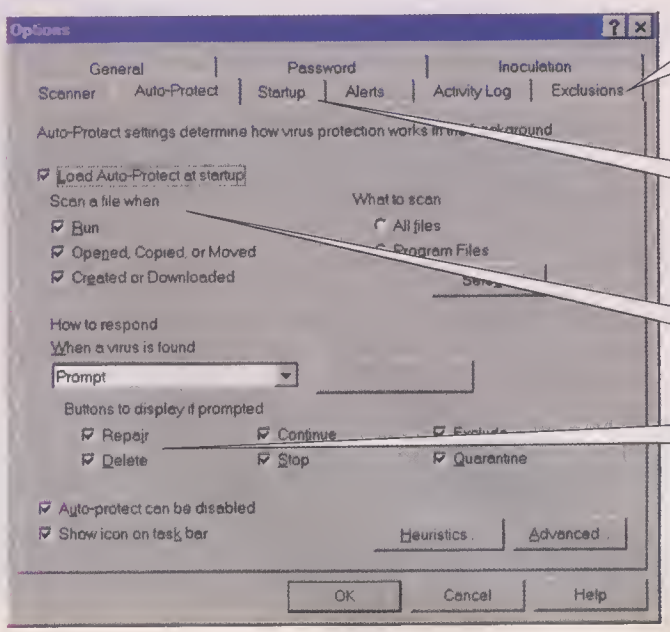
Note that these programs often can't undo the damage to your files after a virus has wreaked its havoc, so the time to take action is now, before you have to deal with a virus in your system. For maximum protection, you should scan for viruses at start-up or whenever your run a program or download something from the Internet. Check below to see how to set up your options in a typical antivirus scanning program.

Create an Emergency Boot Disk

If you don't have an emergency boot disk, go to your computer right now and create one. An emergency boot disk lets you load your operating system in the event that your hard disk crashes, so that you can try to recover the contents of your hard disk using a commercial utility. All antivirus programs let you create a boot disk. Until you get one, here's how to do it now.

From Windows 95/98, Select Start/Settings/Control Panel. From the Control Panel window, open Add/Remove Programs. Select the Startup Disk tab and follow the instructions. Have a blank floppy disk handy.

Macs come with a bootable CD-ROM, so a floppy start-up disk isn't necessary. To boot from a CD-ROM, insert the disc into the CD-ROM drive and press *c* as your Mac starts up.



Some files can create false alarms; an exclusion list lets you skip them.

Configure your antivirus software to check vital system files and memory during the boot process.

For maximum protection, scan files whenever they are created or used.

When the software locates a virus, you'll want to be able to repair or delete the infected file.

Creating
the Live! experience.
Live the experience!

awesome AUDIO

explosive GRAPHICS

thrilling PC-DVD

sensational SPEAKERS

CREATIVE®

WWW.SOUNDBLASTER.COM

We're unleashing a revolut

You'll be captivated!

tion in audio.

Sound BLASTER Live!™

Sound Blaster® Live!™ changes everything you know about audio. We will surround you with an Environmental Audio™ sound experience so amazingly real, it has to be Live! Create new experiences with a wealth of breakthrough technology. Modify any sound source in real-time using amazing audio special effects like flanger, pitch shifter, echo, and distortion. Record and playback crystal-clear audio using the included digital inputs and outputs. Hear audio with more clarity and vibrance than you've ever heard before with hardware accelerated audio streams and multiple speaker support. Experience the ultimate in gaming with Environmental Audio™ support in the coolest new games. Not only will Sound Blaster® Live!™ make your existing games and legacy audio sound clearer, it will be like hearing them for the first time. It's the audio thrill of a lifetime.

Environmental Audio™ by CREATIVE®

So Real It Has To Be Live!

To maximize your true surround-sound experience, add the Cambridge SoundWorks® PCWorks FourPointSurround™ speaker system. It uses four discrete amplified speakers and a separate powered subwoofer to produce effective surround audio — regardless of room acoustics, player head position, or speaker placement. Now you can experience truly immersive 3D audio on your PC.

CAMBRIDGE SOUNDWORKS®

PCWorks FourPointSurround™

"With the ability to do real-time effects, a bevy of digital connectors, and budding support for EAX™, the Live! is a winner..."
— Maximum PC, October 1998
Maximum PC Verdict 10

MAXIMUM PC KICK ASS! product

"Sound quality that's nearly impossible to match at this price... Possibly the best buy in PC audio."
— PC Gamer, October 1998
PCWorks™ FourPointSurround™

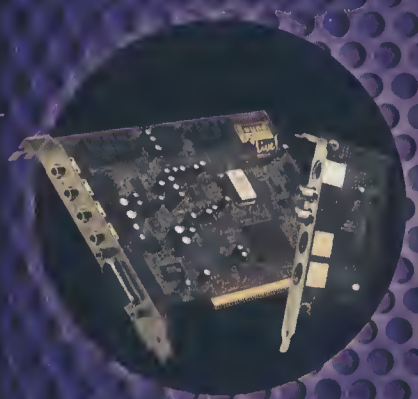
PC GAMER EDITORS' CHOICE

Sound Blaster® Live!™ features:

> Hollywood-quality re-creation with an astounding -120dB noise floor > E-mu®'s most powerful audio processor with 1,000+MIPS and 8-point interpolation > Digital I/O card for easy connection to music keyboards and digital audio recorders > Environmental Audio™ enhances all audio content from the past, present, and future > The Live!Ware program provides upgrades over life of product > Hundreds of cool new and upcoming titles with Environmental Audio™ support

Cambridge SoundWorks® PCWorks FourPointSurround™ features:

> Four compact satellite speakers and a powered subwoofer > Rear surround speakers can be placed anywhere with the included tripod stands and wall mounting accessories > In-line master volume control for all four satellite speakers and subwoofer > Delivers discrete 4-channel surround audio with Microsoft® DirectSound®3D and Creative's Environmental Audio™ supported games



Sound Blaster® Live!™ — the most powerful sound card ever!

www.soundblaster.com/experience/

the Live! experience.

Live the experience!

We're taking you to the ed

You'll be glued to your seat!

dge of the universe.

3D BLASTER Banshee

Buckle up and brace yourself for the visual ride of your life! 3D Blaster® Banshee explodes with rocket-fast 2D performance, startling 3D frame rates, and break-neck video acceleration with an absolutely out-of-this-world price.

Its screaming speed comes from the 128-bit 3Dfx Voodoo Banshee™ processor, which includes a 3D engine based on the Voodoo2™. A full 16MB of 100MHz synchronous memory and a 250MHz RAMDAC give you ultra-high resolution and millions of colors. With DirectX®, Glide®, and 3Dfx OpenGL® drivers, tuned for compatibility with the widest range of applications and games, this affordable, easy-to-install graphics accelerator is a must for every PC. It's a gamer's dream come true and it doesn't break the bank!

"After mercilessly putting our 3D Blaster through its paces, we can happily and heartily recommend it."

— PC Gamer, May 1998
3D Blaster Voodoo2

Graphics Blaster® RIVA TNT™ delivers blood-curdling performance. It's packed with workstation power whether you're a hard-core gamer or a hot-shot 3D designer. An ultra-wide, 128-bit memory architecture synchronous memory supported by a TwiN-Texel, 32-bit color 2D/3D engine that has all the toys: bump mapping, multiple texturing, and even full-scene anti-aliasing. Whether you need to work with incredible precision or play games with liquid-smooth speed, Graphics Blaster® RIVA TNT™ is what you've been waiting for.

3D Blaster® Banshee features:

> Complete 2D/3D graphics solution based on the new Voodoo Banshee™ chipset from 3Dfx Interactive® > Features a full 128-bit graphics engine and Voodoo2™ 3D rendering technology > 16MB of SDRAM and 250MHz DAC deliver awe-inspiring resolutions, rock-solid refresh rates, and stunning visual quality > Boosts your PC's performance and provides compatibility with the widest range of applications and games in a single, cost effective upgrade

Graphics Blaster® RIVA TNT™ features:

> World-class 2D/3D, and video acceleration using the RIVA TNT™ processor from nVIDIA® > Ultra-wide, high speed 128-bit memory architecture and TwiN-Texel 3D pipeline deliver mind-numbing speed in virtually any application > 16MB 125MHz synchronous memory and a powerful 250MHz DAC provide incredibly high resolutions and refresh rates for brilliant, vivid images > Perfect platform for the power-user, gamer or graphic designer

Our graphics line-up utilizes the hottest chipsets available!

www.soundblaster.com/experience/

the Live! experience.

Live the experience!

We're putting you in the ac

You'll be blown away!

ction.

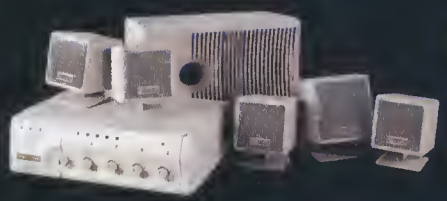
PC-DVD™ ENCORE 5X

With Dxr™2

A heart-pounding cinematic experience is no longer restricted to the big screen! Building on the award-winning success of Creative's PC-DVD™ products, PC-DVD™ Encore 5X brings the digital difference right to your home. Complete with DynamicXtended Resolution™ (Dxr™2) Technology enhanced resolution capabilities, and Dolby® Digital audio for stunning picture and sound, PC-DVD™ Encore 5X will knock you off your feet! Movie playback is just the beginning. PC-DVD™ also runs all your cool CDs. And it can access up to 17GB of information on a DVD-ROM.

To ensure the ultimate live experience, simply add Cambridge SoundWorks® DeskTop Theater™ 5.1 speaker system. Now you can experience truly explosive movie theater Dolby® Digital surround sound with five independent speakers and a subwoofer without the high cost of a Dolby® Digital receiver. Like any great film, words hardly do justice to the PC-DVD™ Encore 5X and the DeskTop Theater™ 5.1 speaker system.

CAMBRIDGE SOUNDWORKS®



DeskTop Theater™ 5.1

"Exceptional quality... picture quality is fab, on both the PC and television monitors."
— C/NET, February 1998
5-Star Gameworthy Review,
PC-DVD™ Encore Dxr™2

PC-DVD™ Encore 5x is the best way to watch movies at home.

PC-DVD™ Encore 5X features:

> DVD player for your TV - The Dxr™2 board comes with high-quality S-video and composite outputs to connect to your TV > DVD player for your PC - a high-definition, resolution-enhanced DVD player on your PC monitor in a fully resizable window > 3rd Generation DVD-ROM drive screaming at 5x DVD speed > Dxr™2 movie picture enhancer is comparable or better than some expensive line-doublers > Accesses up to 25 times more information than a CD-ROM

Cambridge SoundWorks® DeskTop Theater™ 5.1 features:

> Delivers movie theater sound with Dolby® Digital 5.1 and Dolby Surround® audio with PC-DVD™ or consumer DVD players > Dolby® Digital decoder amplifier with five discrete compact satellite speakers and subwoofer. No separate receiver required > Creative Multi-Speaker Surround™ upmixes stereo to 5.1-channel surround audio > With Sound Blaster® Live!™, it delivers discrete 4-channel surround audio with Microsoft® DirectSound™3D and supported Environmental Audio™ games

www.soundblaster.com/experience/

the Live! experience.

Live the experience!

Go

Live the experience!

the Live! experience.

We're changing the way you think about your gear. We call it the Live! experience. It's a totally different way to interact with your PC. It's a totally different way to stimulate your senses. Transform your ordinary PC into an extraordinary play center at an incredibly affordable price! Head on down to your local dealer and bring your PC to life TODAY!

	Product	Price	Music	Games	Movies	Work & Learn
AUDIO	> Sound Blaster® Live!™	$199.99	◆	●	◆	
	> Sound Blaster® Live!™ Value	$99.99		◆	●	
	> Sound Blaster® PCI128	$69.99		●		●
GRAPHICS	> 3D Blaster® Banshee *(AGP & PCI)*	$99.99 *		◆	●	◆
	> Graphic Blaster® RIVA TNT™ *(AGP & PCI)*	$169.99		●	●	◆
	> 3D Blaster® Voodoo2™ 12MB	Call Now!		◆		
PC-DVD	> PC-DVD™ Encore 5X	$249.99		●	◆	●
	> PC-DVD™ Encore Dxr™2	$199.99 *		●	●	◆
SPEAKERS	> DeskTop Theater™ 5.1	$299.99		●	◆	
	> PCWorks FourPointSurround™	$99.99		◆		
	> SoundWorks®	$99.99 **	◆			●
	> PCWorks™	$49.99 ***	●			◆

* after $30 mail-in rebate ** after $50 mail-in rebate *** after $20 mail-in rebate

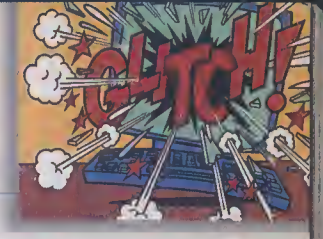
◆ = best suited
● = good choice

CREATIVE®

WWW.SOUNDBLASTER.COM

©1998 Creative Technology Ltd. All other brands or product names listed are trademarks or registered trademarks and are property of their respective holders. Unreal™ 1998 Epic Megagames, Inc. All rights reserved. Created by Epic Megagames, Inc. in collaboration with Digital Extremes. Published and distributed by GT Interactive Software Corp. If you're not on the net, call 1.800.998.1000 for more information. All prices listed are estimated street prices and are subject to change without notice

HOW TO AVOID A PC MELTDOWN



A PERSONAL COMPUTER provides a feast for your senses, with gorgeous 3-D graphics for your eyes, lifelike positional sound for your ears, and even force feedback for your hands (with the right game controller). Once your nose gets involved, however, watch out: The only smell you ever get out of a PC is the odor of burned-out components. This can signal a big repair bill or even the end of your system.

In normal use, the biggest dangers to the components inside your PC are excessive heat and bad power. The former can cause intermittent problems and eventually lead to the failure of important components; the latter can fry your system in milliseconds. You have to protect your computer from both, which means you need to buy power protection equipment and put your computer in a place where it is less likely to encounter environmental dangers.

Spring Cleaning

The fans inside your computer system are a mixed blessing: On the plus side, they move air over heat-generating components, helping to keep your system cool. But they also concentrate dust both on the fans and inside your CPU case, which can cause heat buildup. To get the maximum benefit from the fans, you need to clean out the dust at least twice a year.

Go to your local computer or office supply store and buy a mini-vacuum cleaner and a can of compressed air. With these in hand, unplug your computer and open its case. Once it's open, be sure to touch the power supply periodically to discharge chip-frying static electricity.

Use the compressed air to clean dust from chips, circuit boards, and fan blades. The compressed air helps to clump the dust particles together, making it easier to pick them out or vacuum them up.

With a clean system, your fans will do a better job keeping things cool.

If your PC is located near a window, use blinds or shades to keep direct sunlight off the system.

Leave space behind and above your system and monitor for air to freely circulate. Don't stack papers, disks, or anything else on top of any computer component.

Locate your PC where it is as free as possible from dust, dirt, pollen, and pet hair. Such contaminants coat the components inside your PC, interfering with the cooling action of your PC's fans.

A surge suppressor or UPS (uninterruptible power supply) filters your AC power and offers protection from harmful power surges and spikes that can literally melt electronic components. The added benefit of a UPS is that it provides battery power in the event of a blackout.

Power Protectors

Road Warrior Survival Kit Plus includes surge protection for mobile computers. 1-800-Batteries, 800-228-8374, www.1800Batteries.com; $39.

Back-UPS and Back-UPS Pro battery-backed power and SurgeArrest surge protectors. American Power Conversion, 800-877-4080, www.apcc.com; $39 to $170.

Power99 and Power2000 UPS products. CyberPower, 877-297-6937, www.cyberpowersystems.com; $109 to $220.

SmartSockets surge protectors. Kensington, 800-535-4242, www.kensington.com; $17 to $30.

Internet Office UPS products. Tripp Lite, 773-869-1111, www.tripplite.com; $109 to $239.

DON'T GET BURIED BY FILE GLUT

LIKE CLOTHES HANGERS multiplying in the recesses of your closet, files seem to multiply when you're not looking. As a result, your new multi-gigabyte hard drive, which seemed as boundless as outer space when you first bought it, now has the nerve to report that it has "insufficient disk space." You've been stung by file glut.

Your disk space gets used up in lots of ways, and, in most cases, all you have to do is perform some routine housekeeping to keep your files under control. If you have files you're not likely to need again — such as old letters or reports — then delete them or move them off your hard disk. If you're a heavy Web user, delete the files in your page cache every once in a while to free more disk space. If you download lots of programs, create a temporary folder for download files as you check them out. If you decide to keep them, move them to another folder. Just make sure you periodically delete everything that's left behind in the download folder.

If there are programs you don't use anymore, get rid of them. Check the Start menu to see if they have their own uninstall program. If they don't, try the Add/Remove Programs feature of the Control Panel (which you'll find in My Computer) to delete them. As a final resort, spend the money for a commercial uninstall utility such as UnInstaller or CleanSweep.

Another form of clutter that can choke your hard disk is stray temporary files, which typically get stranded when your computer crashes or someone turns off the computer without first exiting correctly. These files can take up inordinate amounts of disk space. You can track them down using the Windows Find File feature (Start/Find File). Be sure to close all other programs first, and remember to empty your Recycle Bin after you delete any files.

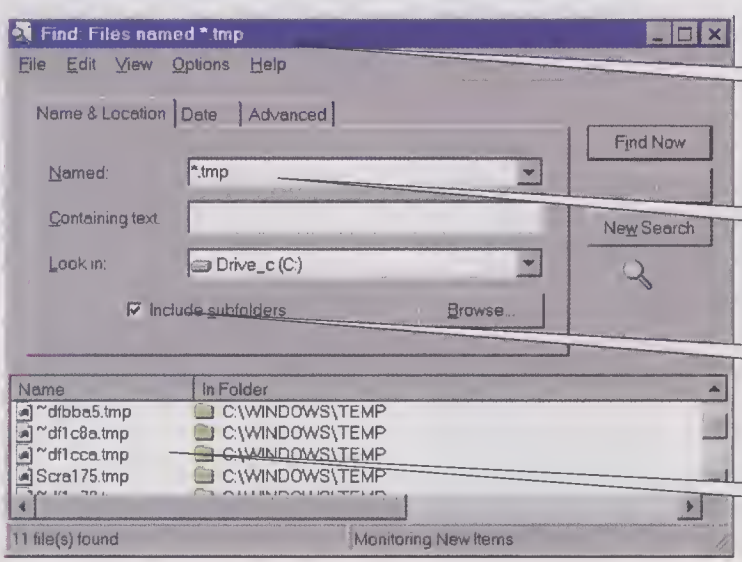
When in Doubt, Don't

Never just delete an application and its folder from Windows Explorer – always use the uninstall option that comes with the program in its Start Program group. If that's not available, try the Add/Remove Programs feature in Control Panel. If Add/Remove Programs encounters a file that may be shared by another program, it will ask you whether you want to delete the shared file. Just say no, because there's no easy way to be certain that no other program uses it. The only exception to this rule is when the file in question is located in the folder that belongs solely to the program you're deleting; in this case, you can probably delete it safely. If you ever have to delete a file that you're not sure you can get rid of, copy it to a floppy disk before you erase it from your hard disk, so you'll have it just in case you need it again.

Unlimited Storage

If you simply need more storage room on your computer, consider a removable media drive. It's great for making backups and storing large files, such as image files and video clips. Here's a sample of your choices.

Drive	Media capacity	Drive cost	Media cost per MB
Iomega Zip	100MB	$100	$0.10
LS-120	120MB	$200	$0.11
CD-RW	650MB	$350	$0.02
Syquest Sparq	1.0GB	$200	$0.04
DVD-RAM	5.2GB	$500	$0.006



Open Find File by choosing Start, then Find, and then Files or Folders.

Search for *.tmp and ~*.* in the Named box, as this will find most temporary files. (The "*" is a wild card that will match any combination of characters.)

To ensure that Find searches your entire disk, make sure to check Include subfolders.

To delete a file, just highlight it and press the Delete key. If the file is in use, you'll get an error message.

Big Screen Excitement for Your Ears

PRESENTING YAMAHA

WAVEFORCE™ 192XG

PCI SOUNDCARD

We know the sound of alien carnage splattered around the walls of a multi-channeled surround sound movie theater gets your adrenal glands pumping. Now you can get that kind of intensity right out of your PC with the Yamaha WaveForce 192 XG PCI Soundcard.

3D positional audio, downloadable sounds, an advanced wavetable synthesizer, incredible sound effects, 676 sounds + 21 drum kits and easy installation make destroying entire alien civilizations a full on blast.

For the best in sound quality, get the WaveForce 192 XG. As for the monitor... you're on your own.

YAMAHA

THE WAY YOUR COMPUTER SHOULD SOUND.

For free brochure please call
(800)823-6414 ext. 4215. www.yamaha.com
©1998 Yamaha Corporation of America,
P.O. Box 6600, Buena Park, CA 90622-6600
Yamaha and WaveForce are registered trademarks of Yamaha Corporation.

SOUNDCARDS • MULTIMEDIA SPEAKERS • CD-REWRITABLE RECORDERS • HEADPHONES

Designed for Microsoft® Windows NT® Windows®95

Available at:

COMPUSA THE COMPUTER SUPERSTORE

ComputAbility Your PC Discount Specialists.

CDW The right price. The right advice.™

Fry's ELECTRONICS

TigerDirect.

...and other fine retailers.

KEEP YOUR PC SAFE FROM THE KIDS

House Rules

A few simple rules will greatly reduce the possibility that your kids could accidentally damage your family computer.

- No food or drink next to the computer. Even if it misses the computer and keyboard, a spill can damage disks and CDs nearby.
- Don't touch the monitor glass. If you want to point out something, keep your finger off the glass, because even the natural oils on your finger (not to mention peanut butter and other substances) can disturb the antiglare coating and leave visible smudges.
- Wash your hands before computing. Peanut butter and jelly not only can jam the keyboard, they can also render disks and CD-ROMs unreadable and can possibly damage your floppy or CD-ROM drive.
- Put away any CD-ROM that's not in use. In spite of their rugged appearance, CD-ROMs are susceptible to damage. If you scratch the data side, you make it difficult or impossible for the drive to read the data. And a scratch on the label side can permanently ruin a disc.

They're small and cute, and you love them dearly, but you'd have to be out of your mind to let your kids have their way with your computer. A small spill here, an accidental bump there, and you could be looking at lost files or damaged components. Because you're the adult in this situation, you've got to establish the rules that govern the use of the family computer.

One thing you can't do is keep your kids away from the computer system. Not only is that unfair, it's downright impossible. Kids are drawn to a computer like moths to a flame, so you have to make sure neither the kids nor the family computer gets burned.

Preschoolers don't need rules; they need to be supervised whenever they are using the computer. With older kids, make sure they understand the rules (see "House Rules") before you give them unsupervised access to the family computer.

Of course, accidents happen, so you can't rely solely on rules. The products listed in "Keep It Clean" can help you avoid damage in the event of an accident and also give you the tools you need to clean up your system.

Because it is the most prominent part of your system, the keyboard comes in for the most abuse. If your keyboard is the victim of a spill, or if it just gets too sticky for comfort, use the steps below to give it a thorough cleaning. Your entire family will appreciate that.

Keep It Clean

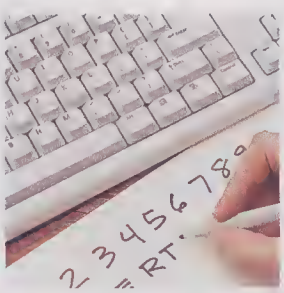
Get the supplies you need to organize your work area and keep your computer clean.

Floppy and CD-ROM cases or racks
File racks with folders for each family member's printouts
Keyboard and mouse dust covers
CD-ROM drive cleaner kit
Floppy drive cleaner kit
Monitor spray cleaner with wipes
Mini vacuum cleaner
Basic computer toolkit

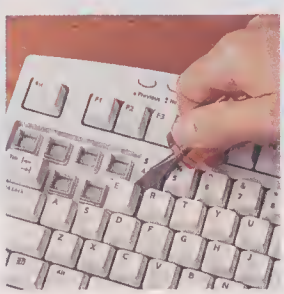
Look for computer cleaning supplies at the following online locations:

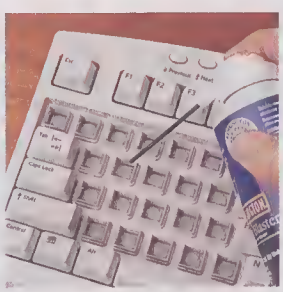
Altex Computers & Electronics, www.altex.com
Computer Gate, www.computergate.com
Cyberguys, www.cyberguys.com
Dalco Electronics, www.dalco.com

1 Before you clean your keyboard, turn your computer off. Next, write down the locations of the keys so you can put them back in the right places.

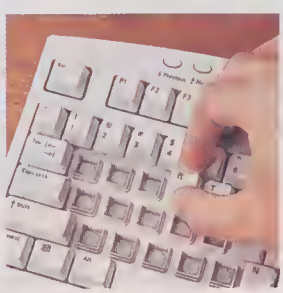


2 Use a thin screwdriver or a butter knife to gently pry up the rectangular keycaps. Don't try to remove the Space Bar, Shift, Enter, or any other oversize keys – it can be difficult to put them back in place.





3 If liquid is present, sop it up with a paper towel. Use compressed air to remove hair, dust, and other loose materials. If you find built-up gunk, use a mild household cleaner on a cotton swap to clean it up.



4 Gently but firmly press each keycap back in place, following the layout in your diagram.

LIVE PICTURE

live pix™

LOONEY TUNES™

PHOTO PRINT STUDIO

- SRP -
$29.95

IT'S YOU AND THE LOONEY TUNES™ ...TOGETHER AT LAST!

LivePix LOONEY TUNES Photo Print Studio lets your entire family turn their photos into fun projects, featuring all of your favorite LOONEY TUNES characters. No other product combines the fun-loving LOONEY TUNES characters with the power of LivePix photography software for creating personalized, memorable photo projects.

ALSO AVAILABLE AT LEADING PC SOFTWARE RETAILERS:

LivePix 2.0 Deluxe: enhance photos and turn them into spectacular collages, cards, and calendars.

LivePix SOHO: create professional-quality marketing materials such as letterhead, business cards, brochures, flyers, and more.

LOONEY TUNES, characters, names and all related indicia are trademarks of Warner Bros. © 1998

www.livepicture.com

LEARN TO RESOLVE CONFLICTS

Conflict Catchers

Once installed, these programs monitor your system and attempt to avert crashes before they occur. Most also include disk scanning and other functions.

Nuts & Bolts 98; Network Associates, 408-988-3832, www.nai.com; Windows 3.1 and 95/98 CD, $39.95.

First Aid 98; Network Associates, 310-664-5000, www.cybermedia.com; Windows 95/98 CD, $39.95.

Conflict Catcher 8; Casady and Greene, 800-359-4920, www.casadyg.com; Mac CD, $79.95.

Norton CrashGuard 4.0; Symantec, 800-441-7234, www.symantec.com; Windows 95/98 CD, $49.95.

Norton Utilities for Macintosh 4.0; Symantec, 800-441-7234, www.symantec.com; Mac CD, $99.95.

Alfred Poor *is a* FamilyPC *contributing editor, and* **Bob Ryan** *is a senior editor. Contact them at alfred_poor@zd.com and robert_ryan@zd.com, respectively.*

IT HAPPENS to the best of us: You precisely follow the installation instructions for the new hardware or software you've just bought, only to have your system go haywire when you try to use it. You're in the grip of one of the toughest problems to deal with as a computer owner: the dreaded configuration conflict.

Though a configuration conflict often results in one or more calls to tech support or a trip to a repair center, you can take measures to deal with it. If you're using a Macintosh, hold down the Shift key while restarting your system so you disable all system extensions. Then use the Extensions Manager control panel to selectively activate the various extensions until the problem recurs. You then know that the last extension you reactivated is the one causing the conflict, so you can remove it.

On a Windows machine, your first sign of a configuration conflict is when your system boots into a special diagnostic mode, called *safe mode.* Before resorting to tech support, use the suggestions below to try to resolve the problem on your own.

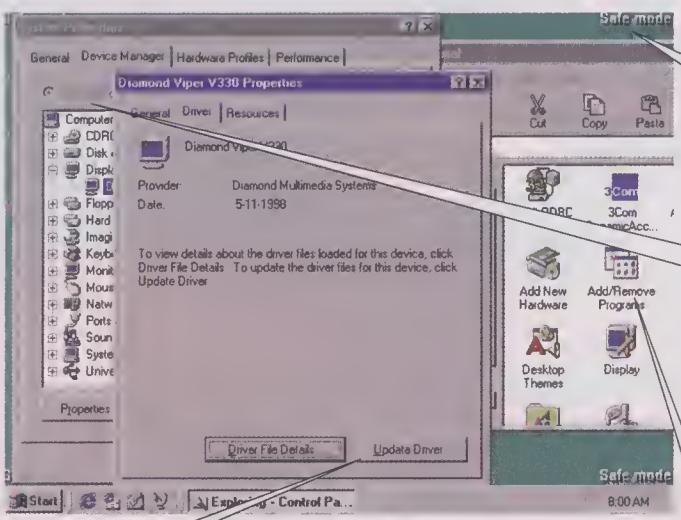
Take Stock

Sooner or later, you're going to run across a software or hardware problem you can't solve. When it happens, the more information you can give the tech-support or repair person, the better chance he or she has of solving the problem. One particularly useful item you can supply is an inventory of the system components.

With Windows 95, run the System Control Panel and select the Device Manager tab. Click on Print and select All devices and system summary. Then click on OK.

Under Windows 98, run System Information from the Programs/Accessories/System Tools folder. Then highlight the information you want to print. Warning: If you simply select Print and output everything, you could be looking at 80 or more pages of output.

On a Mac, you can get basic system information by selecting About This Macintosh (or About the Computer). The Extensions Manager Control Panel gives a list of installed extensions.



Windows will start up in safe mode if it detects a serious conflict in your system. To start safe mode manually, press F8 while your computer is starting up and select that mode from the list of options.

If your conflict occurs after installing a new piece of hardware, check the System Control Panel to discover which device settings are in conflict. Use the control panel to reconfigure one of the devices to remove the conflict, or remove one of the conflicting devices from the system.

If you start having problems after installing new software, use an uninstaller supplied with the software or the Add/Remove Programs Control Panel to remove the offending software until you can contact tech support.

If the problem is caused by recently installed drivers – or by old drivers – select the offending hardware in Device Manager and click on the Properties button. From the Properties window, select the Driver tab to change software drivers.

Microsoft
Combat Flight Simulator
ATTACK
...YOUR ENEMIES AT 15,000 FEET AND BLOW THEM OUT OF THE SKY WITH EIGHT .50 CALIBER MACHINE GUNS AND MIND BLOWING ACCURACY
...YOUR OPPOSING TEAM WITH TIGHT SPIRALS, BLINDING SPEED, AND BONE-CRUSHING TACKLES
...YOUR DEEPEST, DARKEST FEARS HEAD-ON AND WATCH THEM LIMP PITIFULLY AWAY
MADDEN NFL 99
Say hello to Microsoft® SideWinder™ Precision Pro and Game Pad. Your one-way ticket to better play. Unbeatably accurate and reliable, you'll command the game in a way you've only dreamed about. Of course, buttons can be fully customized. And with their ergonomic design, you'll find the buttons exactly where you want them. At your fingertips and under your thumb. The perfect place to kick some serious butt.
Game Pad
PrecisionPro
MICROSOFT SIDEWINDER
Want more? Visit microsoft.com/SideWinder
© 1998 Microsoft Corporation. All rights reserved. Microsoft and SideWinder are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
© 1998 Electronic Arts. John Madden Football and EA SPORTS are trademarks or registered trademarks of Electronic Arts in the U.S. and/or other countries. All rights reserved. Officially Licensed Product of the National Football League Players. © 1998 Players Inc. The PLAYERS INC logo is a registered trademark of the NFL Players. NFL Materials © 1998 NFLP.
PLAYERS INC

RESOURCES

Online Support

Check out these sites, offering automatic updates for your applications and software drivers.

Oil Change; Cybermedia, 310-664-5000, www.cybermedia.com; Windows 95/98 CD, $39.95.

TuneUp; Quarterdeck, 800-354-3222, store.quarterdeck.com; Windows 95/98 CD, $39.95.

Utility Suites

Great packages for one-stop utility shopping

In the past six months, Symantec, Network Associates, and Quarterdeck have announced utility suites that incorporate their stand-alone utility packages into comprehensive software toolkits for PC owners. The suites also provide a common interface so you can move easily from one utility to another. Here's what you get in each suite.

Quarterdeck's Utility Pack

Quarterdeck's Utility Pack combines CleanSweep, Crash Defender Deluxe, and ViruSweep in one package. It also includes a one-year subscription to TuneUp.com, where you can get automatic drive updates. *QuarterDeck, 800-354-3222, store.quarterdeck.com; Windows 95/98 CD, $59.95.*

McAfee Office

McAfee Office consists of 10 utilities, including ViruScan, Nuts & Bolts 98, First Aid 98, UnInstaller, Guard Dog, 2000 ToolBox, and Oil Change. *Network Associates, 408-988-3832, www.nai.com; Windows 95/98 CD, $99.95.*

Norton SystemWorks

This package includes Norton Utilities, AntiVirus, CrashGuard, and a six-month subscription to Norton Web Services. *Symantec, 800-441-7234, www.symantec.com; Windows 95/98 CD, $99.*

FamilyPC Computer Maintenance Schedule

Like an car, your family computer will run better if you perform periodic maintenance. By following the schedule below, you'll minimize the danger of virus attacks, disk crashes, and system conflicts. On Windows systems, you can use the System Agent (Windows 95) or Scheduled Tasks folder (Windows 98) to automate the running of system utilities.

	January	February	March	April	May	June	July	August	September	October	November	December
Scan hard disk — Standard	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly
Scan hard disk — Thorough	•						•					
Defrag hard disk	•	•	•	•	•	•	•	•	•	•	•	•
Full backup (family use)	•						•					
Full backup (home office)	•	•	•	•	•	•	•	•	•	•	•	•
Incremental backup (family use)	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly	Weekly
Incremental backup (home office)	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily
Download virus updates	•	•	•	•	•	•	•	•	•	•	•	•
Virus scan, entire hard disk	•	•	•	•	•	•	•	•	•	•	•	•
Clean keyboard and mouse	•			•			•			•		
Clean inside system	•						•					
Create emergency boot disk	•											
Update drivers	•		•		•		•		•		•	
Clean up unwanted files	•	•	•	•	•	•	•	•	•	•	•	•
Perform system inventory	•											

If it weren't for Family Tree Maker®, I would never have found my family

Using Family Tree Maker, Diana found her great-great grandparents Hannah & William Hunt Wilson.

The Easiest & Most Complete Resource for Building Your Family Tree

Dear Family Tree Maker,

I became interested in genealogy because I never knew my ethnic heritage. The only ancestor name and location I knew of was that of my great-great grandfather, William Hunt Wilson who lived in Oregon.

I then decided to purchase a genealogy program, and chose Family Tree Maker because of the FamilyFinder™ Index. I went home, loaded the program, did a search in the FamilyFinder Index using my great-great grandfather's name, and it referenced a World Family Tree™ CD.* I couldn't believe my eyes!

I found the name "William Hunt Wilson" on the CD. The family tree was huge — hundreds of names! My name was not there, so I decided to contact the tree's contributor to let her know that I found the connection. I left a message, and that night, I received the long-awaited call. The contributor, who is also my cousin, was screaming on the phone because she could not believe she had found me. **I was part of a "long lost leg" that the family had not heard of for over 50 years!** We laughed, we cried, and talked all night. And now, we have contact every day — either by phone or by email.

A family reunion is scheduled to take place this Fall, thanks to Family Tree Maker. I never would have found my family if it weren't for the program.

Thank you!

Diana Yasher

San Jose, CA

FIND ANCESTORS GUARANTEED

- FamilyFinder Index tells you exactly where to find information on your family
- World Family Tree links people tracing the same family lines
- Electronic "agents" search the Internet and send email when they find leads
- Display results in professional quality family trees, family books, and reports

AWARDS WON!

PC MAGAZINE Top 100, 9/97

HOT LIST ComputerLife 1996/97/98

Family Tree 1996/97/98

Online Genealogy Journal of Reader's Choice 1996

CODIE 1997/98

Awards won by Family Tree Maker™ Deluxe Edition III, the previous version.

SOURCE CODE 622028A

Brøderbund

*The World Family Tree CDs contain actual family trees. Contributor information is available free upon request. Family Tree Maker is available for Windows 95 and Power Macintosh. Features vary according to platform and price. Additional accessory CDs sold separately.

©1998 Broderbund Software, Inc. All products are trademarks of their respective holders.

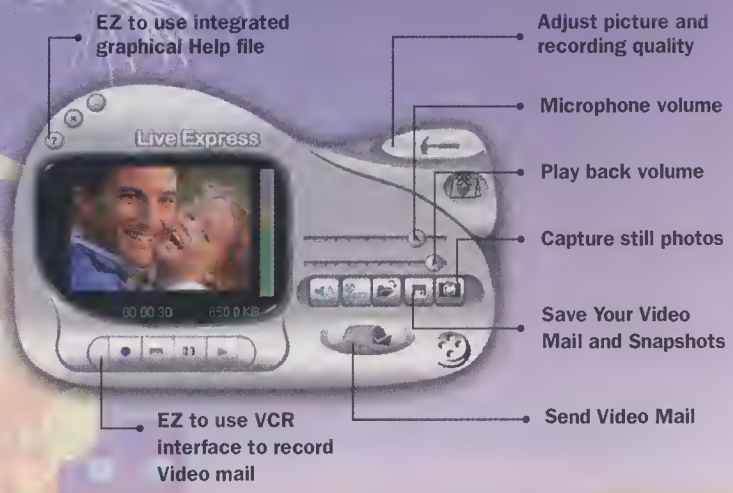
Call us at 1-800-315-0669 or visit www.familytreemaker.com/fampc

EZCAM USB

3 in 1 PC Camera Video Mail, Video Conference, Still Pictures

Why EZCam USB?

- Send Video Mail to Friends, Family and Business Associates.
- Video Mail you send requires no additional software to playback, just double click.
- Video conference over regular phone lines and the Internet.
- Capture Still Pictures and have fun with the included software.
- EZ plug & play installation. Just Plug EZCam into your USB port.
- Toll-Free Personal Response Center to answer all your questions.



Warning: **Not all Video Mail Software Programs Are Equal.**

- EZCam Video Mail requires no special software on the receiving end. It's a self-executable file, just double click. Other cameras Video Mail programs require special software on the receiving end to view their Video Mail.
- EZCam Video Mail also compresses the Video Mail file. The smaller the file size the easier to send and receive. Other cameras Video Mail software creates files up to 10 times larger than EZCam.

Enter AMERICA's BEST VIDEO MAIL contest and win Great Prizes

1-Grand Prize: A Family vacation to Disneyland and a complete N Vision Multimedia PC including an EZCam USB and Ulead Media Pro 5.0 software.

1-First Place Prize - A complete N Vision Multimedia PC including an EZCam USB and Ulead Media Pro 5.0 software.

4 Second Place Prizes - An EZCam USB and Ulead Media Pro 5.0 software.

4-Third Place Prizes - A one year subscription to Family PC

To enter see the official rules included with your EZCam or on our web site at **www.ezonics.com**

Enter in 1 of 4 categories:

Americas Funniest

Americas Happiest

Americas Most Adorable

Americas Most Interesting

Ezonics®
we make high tech EZ

America's Best Video Mail contest is sponsored by:

Ezonics® we make high tech EZ · FamilyPC · N-VISION™ Providing N sight to your future · Ulead Systems

EZCam USB is available at:

pcmall.com www.pcmall.com · PC CLUB www.pcclub.com · egghead.com www.egghead.com · MICRO CENTER® THE COMPUTER DEPARTMENT STORE® www.microcenter.com

48521 Warm Springs Blvd. Suite 315, Fremont, CA 94539 • TEL: 510/668/0619 • Fax: 510/668/0929

We Interrupt This Program...

TVs and PCs are colliding in America's living rooms — what will the aftermath look like?

By Gregg Keizer

In the seemingly staid living rooms of America, a battle is brewing between the tried-and-true veteran (the TV) and the young upstart (the PC). What's the prize? Your family's attention and the right to occupy cherished space as the entertainment center of choice for your family. Already, hundreds of thousands of American families are blending the worlds of the PC and the TV and, in the process, changing the idea

of what the very words *computer* and *television* mean.

Take Suzanne Vos, one of 400,000 people nationwide who subscribe to WebTV, a set-top box and subscription service that delivers the World Wide Web via the TV screen. Although there isn't a personal computer anywhere in the house (70 percent of WebTV owners don't own a PC), Suzanne, her husband, and her two teenagers can surf the Web and send e-mail, just as if they had a PC jacked into the phone line. And they do it from the comfort of the couch.

That's Fast Service

Time it took to reach 50 million users:

- **Radio took 38 years.**
- **TV took 13 years.**
- **Web took 4 years.**

Source: Pittsburgh Post Gazette

"We use WebTV for e-mail, for entertainment, and for education," Vos said. "And from what I hear talking to my friends who own computers, I have a lot less trouble getting online. A *lot* less trouble."

If families like hers push a technology envelope, it's an envelope that needs pushing. The TV, long the preeminent entertainment (and dare we say it, educational) machine in the home, is showing its age — the basic technology of television goes back more than 60 years. Today, in a world of instant, personalized information from the World Wide Web, TV's shortcomings are easy to spot: TV gives you what *it* wants to deliver, when *it* wants to show you; TV aims at millions, not just you and your family; and TV is slow to change. Except for news channels and live sports broadcasts, TV's information is days, weeks, months out-of-date by the time it's aired. The Web is more personal and immediate.

But rather than simply overtake and leave the TV to sit astride the dustbin of history, the PC wants to glom onto it. The PC wants to become more like the TV. And in a note of high irony, TVs want to become more like PCs.

How is this happening? Well, it's happening in several ways simultaneously. And for those waiting for the crash, we examine three paths that TVs and PCs are taking as they sometimes rush, sometimes stumble, toward a colossal collision in your living room.

ABC, NBC, CBS, PBS,... and URL?

What's the technology: *WebTV — a service available via a set-top box that lets you surf the Web with your TV.*
What does it do to TV: *It adds easy Web access and TV-enhancing features such as interactive channel guides and program information.*
What does it do to PCs: *It breaks the PC's monopoly on Web access and offers an alternative, PC-less route to the Web.*
How much: *$100 to $200.*

Easily the most recognizable name in the "PC meets TV" sweepstakes (if you watch late-night cable, you've probably seen WebTV 30-minute infomercials — WebTV Networks plans to spend $15 million on national ads), WebTV boxes are, in fact, miniature computers. Inside Sony's small WebTV Plus box, for example, is a 167-MHz processor, a 1.08GB hard drive, and a 56-kbps modem. On the box's outside, you'll find a printer port and infrared sensors for remote or keyboard control. But WebTV's computerness is hidden. There's no Windows to boot, no software to install, no menus or commands to decipher.

Once you plug it into your phone line and TV (the whole setup takes half an hour at most), WebTV becomes a dedicated Web-browsing machine. You use it as you would a browser-and-modem-equipped Windows or Mac system to head to Web sites and to send and receive e-mail. Its simplified interface doesn't look anything like Internet Explorer or Netscape Navigator (and is even easier to navigate than AOL), but it does let you bookmark favorite sites, scroll up and down, and move backward and forward. And you can hook up Hewlett-Packard DeskJets from the 400 or 600 series to print what you see on the screen. Monthly access fees range from $14.95 to $24.95 per month, depending on the WebTV model you buy and whether you use your own ISP or connect via WebTV's access numbers.

"It's a lot easier to sit on the couch with your feet up and search the Net," said Matt Roseboom, a WebTV Plus user from Marco Island, Florida.

WebTV's a great way to keep in contact with family and friends by spending a couple hundred dollars.

–Suzanne Vos

PHOTOGRAPHS: LIGHTWORKS PHOTOGRAPHIC

But WebTV is more than an inexpensive way to get on the Web (the original WebTV Classic boxes cost about $100, but the newer and much more flexible WebTV Plus runs twice that). WebTV Plus lets you watch both TV and the Web simultaneously using picture-in-a-picture technology (even if your television set doesn't have it built in). And its offline television program guide — which downloads daily to the system's hard drive — organizes an entire week's worth of TV shows. A click on any program in the guide gives you information about that show — the stars, the stats, and more — and switches your TV tuner to that channel. Sure beats channel surfing.

Put a TV in Your PC

What's the technology: *TV tuner cards for PCs.*
What does it do to TV: *It delivers TV stations to your PC screen.*
What does it do to PCs: *It allows you to watch or capture TV while you're computing.*
How much: *$100 to $200.*

Sure, you can go the WebTV route by pairing a puny PC with the television set that already dominates the family room. Or you can switch what goes where by pouring a TV *into* the computer. The obvious difference is location. While the TV — and thus WebTV — hangs out in the same room with a comfortable couch, the computer — and thus any TV on its screen — is likely tucked away in a spot too small for more than one to watch. But that may be exactly what you're after.

Blending TV and PC makes sense if:

- You work at home or in the evenings and want access to TV for work (you watch CNN all day long) or entertainment (watch the ball game while you write that report).
- Your kid has a computer in his bedroom or dorm room but not enough space for a TV, too.
- You want TV *and* the clearest possible Web pages delivered to the same place.

"The whole idea is to have a more fully integrated environment," says ZD Market Intelligence's Dave Tremblay. Sounds good, but all you're interested in is watching a little tube while you compute, as 132,000 PC-owning households already do (according to Media Metrix).

The least expensive way to add TV to a PC is by slipping a new card — a TV tuner card — into an empty slot of your system. Such cards, which run in the neighborhood of $100 to $150, pack some of the same electronics as that inside a traditional television set. What's missing, of course, is the television tube. Instead, tuner cards route the television signal, usually from cable, to the PC's monitor.

Installing a TV tuner card means getting inside the computer and installing a card and device drivers. If you're not comfortable mucking around in the machine, check out AverMedia's TVGenie, an external box that does the same thing but connects to the computer's external video and sound ports. TV tuners usually work best when the PC sports 4MB or more of video memory, and they typically let you watch television in a small window so that you can track both programs — the one on the TV and the one you're running on the computer — simultaneously. A TV picture run full-size on a computer monitor can, however, look slow and blurry.

There are 132,000 PC-owning households that can watch TV as they compute.
–Media Metrix

You also get an added bonus if you go the TV tuner route on your Windows 98 PC: free access to information on the Web. The service that delivers the information is called WaveTop. It lets you get a regular download of tailored information from the Web — NewsTop, KidsTop, and other focused categories — via what's called the *vertical blanking interval*, an unused portion of the TV signal. WaveTop works like this: At regular intervals it downloads from the vertical blanking interval several megabytes of Web information to your PC's hard drive. All of this occurs in the background, so when you get to WaveTop's home

I Want My PC
Among American teens, 28% can live without TV while only 23% said they can live without their PCs.
Source: CNN/USA Today

Jazz is back. And this time he's got a wild hare.

"Jazz Jackrabbit 2 is the perfect game for the whole family, featuring zany characters, a story right out of a Saturday morning cartoon, and vintage side-scrolling gameplay." - GameSlice

"Demented humor, memorable characters and animations combine with fast action and eye-catching graphics to create what could be one of the summer's hottest titles." - online gaming review

"Adrenaline-pumping action from start to finish." - The Adrenaline Vault

"Jazz Jackrabbit is back in business for a sequel that one-ups every other platformer in existence." - GameSlice

"The best side-scrolling game ever...Jazz Jackrabbit 2 is destined to become a classic." - PCME

Created by

EPIC MEGAGAMES™

www.epicgames.com

"★★★★★" - The Adrenaline Vault

"★★★★☆" - Hotgames

"★★★½" - GamePower

Published by

GATHERING OF DEVELOPERS™

www.godgames.com

FROM THE CREATORS OF UNREAL COMES THE HILARIOUS SEQUEL TO THE 1994 ARCADE GAME OF THE YEAR!

Devan Shell is up to no good again. This time, he's stolen Princess Earlong's diamond ring. As Jazz, or his spaced-out brother, Spaz, you must travel through time and take on wacky turtles, bizarre monkeys and more if you want to get the ring back from the evil Devan. If you don't, you could be history.

INCLUDES BOTH THE FULL VERSION OF THE ORIGINAL JAZZ JACKRABBIT AND THE JAZZ CREATION STATION LEVEL EDITOR, WHICH ALLOWS YOU TO CREATE YOUR VERY OWN LEVELS!

JAZZ JACKRABBIT 2™

www.jazzjackrabbit.com

©1998 Gathering of Developers, Inc. All other trademarks and trade names are properties of their respective owners.

page, you can access all kinds of Web information that's already downloaded to your PC. The best part is that the service is free.

Put a PC in Your TV

What's the technology: *Scan converters that send PC signals to your TV and big-screen TVs with PCs built in.*
What does it do to TV: *It sends your PC screen to your TV (in the case of the Gateway Destination, the TV comes with the PC).*
What does it do to PCs: *Lets you combine your PC and TV into one unit with a large screen.*
How much: *$200 to $5000.*

Though computer monitors are great for viewing productivity applications such as word processors and spreadsheets, they're just too small for the kind of shared viewing that a TV provides. If you're looking to integrate a PC into your home entertainment setup, you've got to get it to work with your TV.

The cheapest and most popular solution is a device called a *scan converter*. It takes the RGB signals your PC puts out and converts them into a video signal your TV recognizes and displays. The setup involves attaching devices to your PC's video-out port and your TV's video-in port. Scan converters usually work with both Macintosh and Windows systems.

Something's Got to Give

Activities Web users have trimmed to make time for surfing

• Watching TV/VCR	64%
• Reading	48%
• Sleeping	29%
• Time with family/friends	26%

Source: The Strategis Group

With a scan converter, you can use your big-screen TV to play arcade and family games and view DVD movies. Some, like AITech's PC/TV Airlink, even use wireless transmission to send the display signal from PC to TV, so you don't need to set up your PC next to your TV (it doesn't even have to be in the same room). You just use a wireless keyboard to essentially control your PC via your TV screen.

If you have a puny TV, you may want to up the size of your display. You'll kill two birds with one $1000-or-so purchase if you

The promise of PC/TV is one of more involvement, more interactivity with the television set.

–Dave Tremblay, ZD Market Intelligence

Digital TV: An Up-and-Comer

TVs and PCs both put images on a tube, but that's where the comparison ends. Today's TV is an analog device – electrical signals of varying strengths are converted into a picture – while the computer is digital. With digital devices, pictures are built from the same binary digits (0s and 1s) used to store words in a document or accounts in Quicken. Television, though, is on the verge of its biggest change since the arrival of color.

Starting late in 1998, TV is going digital. By the time you read this – or not far into 1999 – more than 40 stations will have started broadcasting a limited number of hours of digital programming. A few digital television sets should have reached store shelves (floors, really, since the first models weigh more than 200 pounds and cost several thousand dollars). And Princeton will have released its AF3.0HD, a multiformat monitor that displays digital TV signals along with standard PC and TV formats.

What has most professional couch potatoes excited about digital television is HDTV (high-definition television). HDTV features higher resolution for sharper images and a rectangular picture that looks a lot more like a movie's than the almost-square screen of current TVs. And CD-quality audio is delivered digitally in six channels of surround sound. And because digital television is…well, digital…it's possible that some of the broadcast signal can deliver a data channel of, say, news or stock quotes that scroll across the bottom of the screen, Internet-style information, or perhaps even software downloads. Such possibilities (and the fact that both will receive data in digital form) are at the root of any long-term convergence of TVs and PCs.

"There's a lot more opportunity [for interaction] when compatible digital technology exists in both PC and TV," said ZD Market Intelligence's Dave Tremblay. "The back-and-forth becomes a lot easier."

You'll find the lowest term life rates in America at Quotesmith.com or we'll overnight you $500. Other pleasant surprises now include instant auto, life and medical insurance quotes from 375 large, safe & well-known companies.

$250,000 Term Life Sampler
Guaranteed Annual Premiums/Guaranteed Level Term Period

Age	10 YEAR	15 YEAR	20 YEAR	25 YEAR	30 YEAR
35	$ 138	$ 163	$ 198	$ 280	$ 300
40	$ 185	$ 210	$ 260	$ 385	$ 383
45	$ 260	$ 335	$ 395	$ 548	$ 585
50	$ 378	$ 500	$ 600	$ 863	$ 915
55	$ 568	$ 758	$ 865	$ 1,805	$ 2,810
60	$ 908	$ 1,130	$ 1,365	$ 4,100	$ 4,100
65	$1,530	$ 1,845	$ 2,923	$ 5,270	$ 5,270
70	$2,665	$ 3,539	$ 5,405	$ 7,370	$10,070
75	$4,415	$ 7,848	$ 9,650	$13,640	$13,640

"Quotesmith provides a list of all insurance companies & plans that match specific needs. The first to make available this new custom -search service." - *Nation's Business*

"Quotesmith saved us time and money. I shopped from my own office and found the best deal available. I was impressed."
- *Linda Picazio, Ft. Lauderdale, Florida*

"Get quotes on the spot. New source for best buys in insurance. One way to get to know the market." - *Kiplinger's Personal Finance*

"Quotesmith ranked more than 250 policies for Forbes. The premiums vary wildly." - *Forbes*

"Quotesmith keeps a database of about 350 insurance companies." - *Good Housekeeping*

"Quotesmith offers particularly thorough searches."
- *Los Angeles Times*

"Researching insurance companies can be confusing and tedious. To simplify the task, call Quotesmith."
- *SmartMoney*

"Quotesmith will scan the insurers and provide a list of different policies suited to your needs." - *Money*

"Enter the virtual agent. This solution has value for those who value immediacy and privacy."
- *U.S. News & World Report*

Quotesmith is the only Internet site on earth where you can get instant auto, life & medical insurance quotes from 375 top-rated companies. It's lightning fast, easy, informative, unbiased, private and *FREE!*

We give you detailed information - including underwriting requirements - and the latest claims ratings from A.M. Best, Duff & Phelps, Moody's, Standard & Poor's and Weiss Research, Inc. on every term life quote. And when you're ready, you can request an application from the company of your choice online and without having to talk to any insurance salesmen! Avoid buying mistakes. Use the Quotesmith high speed insurance price comparison service before you buy or renew any insurance policy. Have questions or want quotes mailed to you for free? Call us toll-free at **1-800-431-1147**, 24 hrs.

Quotesmith.com®
incorporated

Quotesmith.com

AD CODE: FPC 1/99

Final premiums and coverage availability will vary depending upon age, sex, state availability, hazardous activities, personal and family health history. The male, non-tobacco use premiums shown above may include: Banner Life Ins. Co., Rockville, MD, form RT-97; First Penn-Pacific Life, Hoffman Estates, IL, form BT-1002AA(2-96), Control #B98-198(3/98); Golden Rule Ins. Co., Indianapolis, IN, form GRI-L-17.1; Old Republic Life Ins. Co., Chicago, IL, form 8-1077; Protective Life Ins. Co., Birmingham, AL, form GP-06; Security-Connecticut Life, Avon, CT, form 11420; West Coast Life, San Francisco, CA, form #971137400. Rtes shown are not applicable to residents of FL, NJ & NY. Policy forms vary by state. $500 lowest price guarantee not available in SD. CA #0827712. Some premiums shown are graded premium life policies and/or term-like universal life policies. Premium rates always escalate after initial rate guarantee period.

pick up a Princeton Arcadia big-screen display. The displays sell for between $989 (for a 27-inch model) and $1444 (31-inch screen), and they're an outstanding (if very expensive) addition to a PC you've already equipped with a TV tuner card or scan converter. Like any monitor swap, this one's easy to pull off: Just unplug the old one, and plug in the new one.

Welcome to the Family

- **Percentage of households with at least one TV: 99.**
- **54% of American children have a TV set in their room.**
- **Percentage of households with at least one PC: 45.**
- **25% of households have at least two PCs.**

Source: TV-Free America

Your second PC-in-TV option is a ready-made blend of TV and PC — the Gateway Destination. The Destination is a pretty typical 333-MHz PC that includes a TV tuner and DVD drive, and comes bundled with a big (27- to 36-inch) screen and a wireless keyboard and mouse. Intended for the living or family room, and for computing from the couch (that's where the wireless controllers come in handy), the Destination is available in several models. But with prices ranging from $2000 to $5000, they're expensive in times when many TV-less family PCs cost around a grand.

ZD Market Intelligence's Dave Tremblay isn't hot on the Destination, but he's warming up to it.

"It's a heck of a game machine," Tremblay admits, but he thinks it costs too much. Perhaps. But the Destination is your best bet when you want a PC/TV right out of the box.

And the Future Is...

Which of these technologies will win the battle for America's family rooms? Our money's on something like the WebTV. Watching the free fall of PC prices, it's not hard to imagine a day soon when a WebTV with the equivalent of a home PC costs just a couple hundred dollars and, like a laptop, is squeezed into such a small space that it simply stacks with the rest of the home entertainment gear, like the VCR or CD player.

That doesn't solve all the problems associated with this mingling of TV and PC, however. Because so much of the PC's power depends on the Internet, the real success of PC/TV blends will require really fast, really fat pipelines to the Web. "The biggest obstacle for PC/TV integration is bandwidth," says Dave Tremblay.

But at least one person is sure that this day will come. "Eventually your computer will *be* your TV," says Matt Roseboom, who now surfs the Internet on a WebTV. "Someday, everything you do now on a computer, you'll just do through your TV."

Gregg Keizer *is a* FamilyPC *contributing editor. E-mail him at gaKeizer@aol.com.*

A PC-to-TV, TV-to-PC Sampler

If you want to check out the options, visit some of the Web sites for the products below.

Surf with Your TV

- **WebTV Networks**, 800-469-3288, www.webtv.com
Produces technology and services used in WebTV Plus receivers manufactured by Sony (www.sel.sony.com), Philips Magnavox (www-us.sv.philips.com/multimedia), and Mitsubishi (www.mitsubishi-tv.com).

- **UniView Technologies**, 888-864-8439, www.curtismathes.com
The uniView 210 ($399) lets you browse the Web from your TV as well as send and receive faxes and e-mail via the Internet.

Add TV to Your PC

- **AITech**, 800-882-8184, www.aitech.com
The WaveWatcher Net-TV 98 ($89.95) TV tuner card supports Microsoft's WebTV for Windows 98.

- **ATI Technologies**, 905-882-2600, www.atitech.com
The All-in-Wonder Pro ($169) combines a TV tuner with 2-D/3-D graphics acceleration, video capture, and PC-to-TV-out for Windows systems.

- **AverMedia**, 510-770-9899, www.avermedia.com
The TV 98 tuner card for Windows supports WebTV for Windows, which is included in Windows 98. TV Genie ($95) is an external TV tuner for Windows systems and Macs.

- **Hauppauge Computer Works**, 516-434-1600, www.hauppauge.com
WinTV PCI ($220) lets you watch TV on your Windows monitor; WinCast/TV ($109) lets you receive Intel's Intercast Internet broadcasts.

- **Matrox**, 800-844-8312, www.matrox.com
The Marvel G200-TV ($299) adds a TV tuner to the Marvel G200 2-D/3-D graphics card. It includes software that lets you capture and edit your home videos.

Put a PC in Your TV

- **AITech**, 800-882-8184, www.aitech.com
PC/TV Airlink ($299) is a wireless scan converter, so your PC doesn't have to be next to your TV. MultiPro Plus ($239) is an external scan converter for Windows and Mac systems.

- **AverMedia**, 510-770-9899, www.avermedia.com
The AverKey300 ($249) scan converter lets you send Mac or Windows output to a TV at resolutions up to 1024 by 768 pixels.

- **Gateway**, 888-639-9724, www.gateway.com
Starting at $1999 (333-MHz Celeron with 27-inch display), Gateway Destination XTV systems tightly integrate TV and computer information.

- **Princeton**, 714-751-8405, www.prgr.com
Arcadia monitors (from $995) double as PC and television displays. The AF3.0HO monitor displays HDTV.

Show & Tell

for the Holidays

EDITORS' CHOICE PCPhoto

Named One of 125 Best Software Titles
(PC Magazine, Your New PC, Winter 1998)

Familiar User Interfaces
Create libraries af digital phata albums autamatically.

Partable Player
E-mail saund-enabled, self-running albums ta family and friends.

Web Publishing Wizard
Publish albums ta the Web — na HTML experience required.

Custam Printing
Design any praject in minutes with easy-ta-use publishing taals.

Communicating taday is abaut mare than slide shaws ar greeting cards. It's abaut embracing technalagies that tronsmit your wards and images acrass new harizans. It's abaut Shaw and Tell far the madern age, and the human roce is yaur audience.

Let PhataRecall Deluxe 2.0 be yaur cammunicatian medium. PhataRecall Deluxe 2.0 rapidly lacates images-fram digital cameros, scanners, disc-based files, ar the Internet-and organizes them in libraries of virtual phata albums. Type infarmatian abaut yaur pictures inta custamizable data fields. If words aren't enaugh, add saund. Then use the Internet, e-mail, ar traditional print ta intraduce yaurself ta the warld.

Get arganized fast, cammunicate better with PhataRecall Deluxe 2.0.

www.photorecall.com 1.888.772.7601

Available @: COMPUSA THE COMPUTER SUPERSTORE · MICRO CENTER · BEST BUY · COMPUTER CITY · J&R COMPUTER WORLD · THE CAMERA SHOP

G&A Imaging

PhotoRecall 2.0™ DELUXE

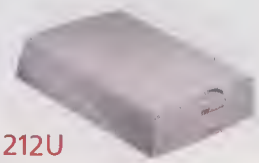
Microsoft and Microsoft Windows are registered trademarks of Microsoft Corporation.
PhotoRecall is a trademark of G&A Imaging Ltd. All other trademarks are the property of their respective owners.

expand your mind. legally.

An Agfa SnapScan™ lets you see things in ways you've never seen them before. Like amazing reports, sales sheets, greeting cards or anything else you can dream up. And it comes with software that lets you combine images, make colors more vivid and details more clear. So test the limits of your imagination. With an Agfa SnapScan.

SnapScan 1212P

600(h) x 1200(v) dpi resolution, 36-bit, parallel port connection for easy installation and Agfa's OptiSpeed™ for superior performance.



SnapScan 1212U

600(h) x 1200(v) dpi resolution, 36-bit, USB connection for easy hookup and perpetual standby.

SnapScan 1236S & SnapScan 1236S Art Line

600(h) x 1200(v) dpi resolution, 36-bit, ISA SCSI connection for fast scans, optional transparency module and automatic document feeder.

Software

All come with Agfa FotoLook™ and FotoSnap™ for easy control of color, resolution and sizing; Visioneer PaperPort™ software for scanned document management, including fax, copy and print functions; OmniPage™ LE OCR software; iPhotoExpress™ PC image editing software; and ColorIt!™ for the Mac® The SnapScan 1236S Art Line also comes with additional creative software from MetaCreations.™

AgfaJet™

For great results, print on AgfaJet.

Tel.: 1-888-281-2302, Fax: 1-978-658-4193.

www.agfahome.com

AGFA Agfa

The complete picture.

Catalogs:
CDW • Club Mac • Mac/PC Mall • Insight • Micro/Mac Warehouse • Multiple Zones PC/Mac Connection • Publishing Perfection • Tech Squared

Retail Stores:
B&H Foto • Fry's • RCS Computer

AGFA and the Agfa rhombus are registered trademarks of Agfa-Gevaert AG. All other trademarks and tradenames are property of their respective owners.

Reviews

Hardware

- (93) Compaq Presario 5050
- (90) Packard Bell Platinum 7800
- (89) Compaq Presario 2266
- (86) Hewlett-Packard Pavilion 6355
- (86) Comtrade DVD Family Best Buy 450
- (87) IBM Aptiva SE7
- (89) Gateway Solo 3100XL
- (85) IBM ThinkPad i1450
- 84 WinBook XL 233/DS
- (89) Storm ImageStudio VF
- (93) Guillemot Phoenix
- (90) STB Velocity 4400
- (90) Diamond Viper V550
- (92) Matrox Marvel G200-TV

System Testing

FamilyPC relies on industry-standard Ziff-Davis benchmark tests. For systems – including notebook computers – we rely primarily on the Winstone and WinBench tests. Winstone measures how long it takes for a computer to run a series of common productivity applications. WinBench measures the performance of system components such as the CPU, hard drive, graphics card, and CD-ROM drive. We use 3D WinBench to test graphics performance.

Software

- (89) Print Shop Deluxe 6.0
- (86) PrintMaster Platinum 7.0
- 82 Print Artist Platinum
- (87) Microsoft Publisher 98
- 71 PagePlus 5.0
- (88) Adventures in Typing with Timon & Pumbaa
- (88) Learn to Program BASIC
- (85) KidSpeak
- 79 Super Tutor Spelling
- 78 3D Castle Creator
- (88) Walt Disney: An Intimate History of the Man and His Magic
- 82 Earth Journal: Sierra Club Perpetual Calendar Software

FamilyTested Software

This month, 111 family testers installed and used publishing programs in their own homes, using their own equipment, for three weeks and then filled out questionnaires, which were created with the help of Digital Research, an independent research firm. FamilyTested software is rated on Satisfaction, Ease of Use, Long-Term Value, and Features.

"Quote of the Month"

"I like [Print Shop's] Quick Start feature. Sometimes I'm not sure exactly what I want to do, and this gets me going."

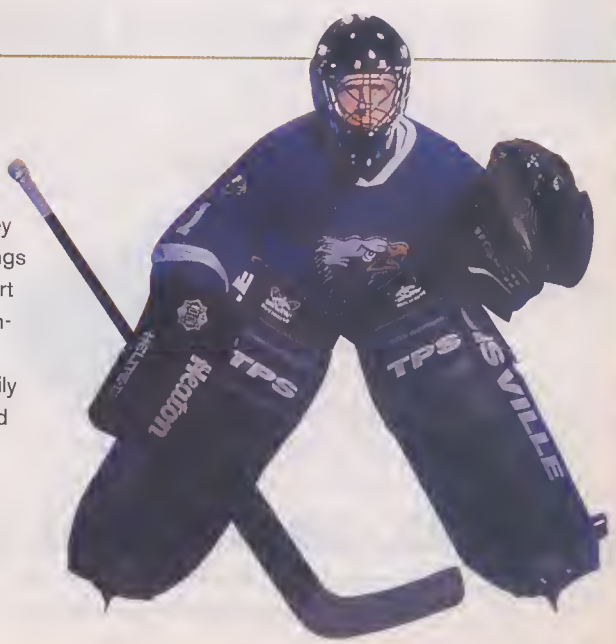
–Melanie Ciparik, Jarrettsville, Maryland

GameTime

- (90) NHL 99
- (90) Need For Speed III: Hot Pursuit
- (88) All New Hoyle Card Games
- (88) All New Hoyle Board Games
- (86) Game of Life
- (86) Icarus: Sanctuary of the Gods

Cool Winter Games

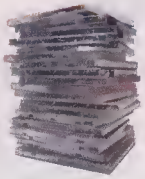
Our unique Bottom Line rating of each game lets parents know more than they can learn from violence ratings available elsewhere. We alert parents to inappropriate content and provide a difficulty rating so they can more easily fit a game to their values and their children's ability level.



Products that score (85) or higher are *FamilyPC* Recommended.

NetFlix.com is the easiest way to rent a DVD!

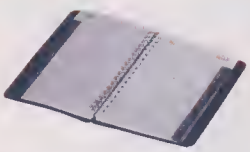
Just get on the Web and go to www.netflix.com.



We have virtually every DVD title available so you won't have to deal with your video store's meager DVD selection. And, because we have hundreds of copies of each movie, you'll never have to fight

to get a copy of a new release.

It's SO simple. Just pick your movies, they arrive in a day or two, and you keep them for 7 full days!



When you're finished, you just send them

back in our convenient pre-addressed, prepaid mailer. And, as if that wasn't enough, it's also amazingly affordable!

Rent your

first two DVD's for just four bucks each! Rent additional titles

for a measly three dollars! And the newest releases from Hollywood

can be reserved for only five dollars! So go take a look at

www.netflix.com the easiest way to rent a DVD!

Copyright © 1998 NetFlix, Inc. NetFlix, NetFlix.com and the NetFlix logo are trademarks of NetFlix, Inc. Images copyright © 1997 PhotoDisc, Inc.

Why Pay More?

Four bargain systems show why most people don't need to spend more than $1500 for a family computer **By Steve Apiki**

If you want a computer in order to play arcade-quality games, edit home videos, watch DVD movies, or try out the latest speech-to-text products, you're in the wrong place (you want to check out the 450-MHz screamers reviewed a few pages hence). Everybody else – and we do mean everybody – will find more than enough computing power in one of the four sub-$1500 systems we feature this month.

Gamer's Bargain
The $1448 Presario 5050 is ideal for games and work, too.

No longer does "bargain" mean "compromise." These four systems — two from Compaq, one each from Packard Bell and Hewlett-Packard — have plenty of power for what most people want to do with a personal computer: browse the Web, handle personal finances, run educational software, and bring work home from the office. Moreover, they can handle all but the most graphics-intensive games, as well as provide enough horsepower to edit family photographs. Here's how they stack up to high-end systems costing at least $1000 more.

Performance: The CPU choices in these bargain systems range from a 225-MHz Cyrix M II-300 on the low end to a 350-MHz Pentium II with BX chipset. The slowest system offers 60 percent of the performance of a 450-MHz Pentium II; the fastest reaches 80 percent of a 450's speed.

Memory: The 64MB minimum on the bargain systems matches the amount of RAM you see in many high-end systems.

Hard disk: You get 4 to 8GB of hard disk space in a bargain system, compared to 10GB and more in a high-end system. A 4GB hard drive gives you enough storage for a variety of projects — anything this side of editing digital video.

CD-ROM drive: You don't find DVD drives on these bargain systems, but high-speed (24x or 32x) CD-ROM drives are standard.

Display: Is the 14-inch monitor finally dead? The bargain systems all sport 15-inch monitors, compared to 17- and 19-inch displays on the high-end systems. Flat-panel LCD monitors are unknown on the low end because they would double the price of a system.

3-D graphics: Bargain systems don't have the high-performance 3-D graphics cards you see on more expensive systems. Some bargain PCs include low-to midrange 3-D graphics cards for passable 3-D gaming.

Sound: You get good sound cards and speakers on bargain systems, but the audio components on higher-end systems are demonstrably more powerful.

Modems: 56 kbps, just like the big boys.

The bargain systems we tested show surprising diversity. The least expensive system — the Compaq Presario 2266 — costs under $1000, even with a 15-inch monitor. It provides excellent basic functionality but few extras. The most expensive system, the Compaq Presario 5050, has lots of RAM and hard disk space, midrange 3-D graphics, and positional 3-D sound, making it a decent game machine as well as a good general-purpose system. It is our favorite among these four because it strikes the best balance between features, performance, and price. All four systems earn *FamilyPC* Recommendations, however, because all deliver excellent value. Find out which one meets your budget and your needs.

PHOTOGRAPHS: LIGHTWORKS PHOTOGRAPHIC

Compaq Presario 5050

Brawny Bargain System

Bottom Line: Recommended. We like the overall Presario 5050 package, especially for gamers on a budget.

FAMILYPC TESTED 93

At $1448 (including a $100 Internet rebate), the Compaq Presario 5050 is the highest-priced system in our roundup. With 96MB of SDRAM, an 8GB drive, and the best 3-D graphics system in this review, you can understand why. If 3-D game performance is important to you, or if you need extra memory and disk capacity for image editing, the Presario 5050 is made for you.

The Presario 5050 is based on Intel's 333-MHz Celeron chip, which is a cost-reduced version of the Pentium II (128KB cache versus 512KB on the Pentium II, though the Celeron's cache is faster). The Presario 5050 finished just behind the Packard Bell Platinum 7800 on our overall performance testing, and finished ahead of the 7800 in 3-D graphics tests. The combination of Celeron processor and ATI 3D Rage LT Pro 3-D graphics accelerator makes the Presario 5050 a good low-cost alternative to high-end systems for 3-D gamers.

We tested the Presario 5050 with a 15-inch Compaq Presario MV500 monitor, which has built-in JBL Pro speakers. The combination delivered good sound quality, the best among systems in this review. The Presario 5050 supports full positional sound using Aureal A3D technology for outstanding game effects.

Compaq includes a nice CD-ROM bundle that covers the basics: Microsoft Works, Money, Encarta, and Bookshelf. It also has some nice extras, such as front-panel USB and joystick ports and a quick-access multimedia keyboard.

Compaq, *800-345-1518, www.compaq.com; $1448.*

Packard Bell Platinum 7800

Low Cost, High Performance

Bottom Line: Recommended. Unless you're on a tight budget or need a little extra game performance, Packard Bell's low-cost system is a standout choice.

FAMILYPC TESTED 90

Packard Bell's Platinum 7800 proves that low cost doesn't have to mean low performance. The $1198 Platinum 7800 outran the other systems on our speed tests to earn its place as our best-performing bargain machine. Add Packard Bell's excellent software bundle to the Platinum 7800's performance, and you've got the makings of a real family favorite.

The Platinum 7800 doesn't include a lot of innovative cost-cutting technology — it's simply built around components that were standard in high-end systems just a few months ago. It features a 350-MHz Pentium II processor with built-in 512KB level-2 cache and the Intel 440BX chipset. Also used in high-end systems, the BX chipset supports a fast 100-MHz system bus, as well as AGP graphics. This high-speed processing hardware, plus 64MB of SDRAM and a quick 6.4GB hard drive, earned the Platinum 7800 the top score on our Winstone 98 benchmark, which measures system performance running productivity applications. Its Winstone score is about 80 percent that of the fastest machine we've tested to date, a 450-MHz Pentium II Dell system that costs nearly twice as much.

The multimedia components of the Platinum 7800 are good but not great. You get 16-bit wavetable sound, though the speakers integrated into Packard-Bell's 5480 monitor sound a little flat. The 3-D acceleration hardware (an ATI Rage IIc) runs 3-D games, but you won't get the kind of speed and quality you get with a high-end 3-D solution.

The software bundle is the best among the bargain systems, featuring Microsoft Word, Works, Encarta, and Entertainment Pack, as well as family-style utilities such as a Web browser for kids, a helpful navigation bar, and some good tutorials.

For families with little interest in 3-D games, the Platinum 7800 may offer the best mix of price, performance, and family features.

Packard Bell, *800-733-5858, www.packardbell.com; $1198.*

No Waiting No-compromise performance makes the Platinum 7800 our second choice among low-cost systems.

Compaq Presario 2266

Anything but Slim Pickings

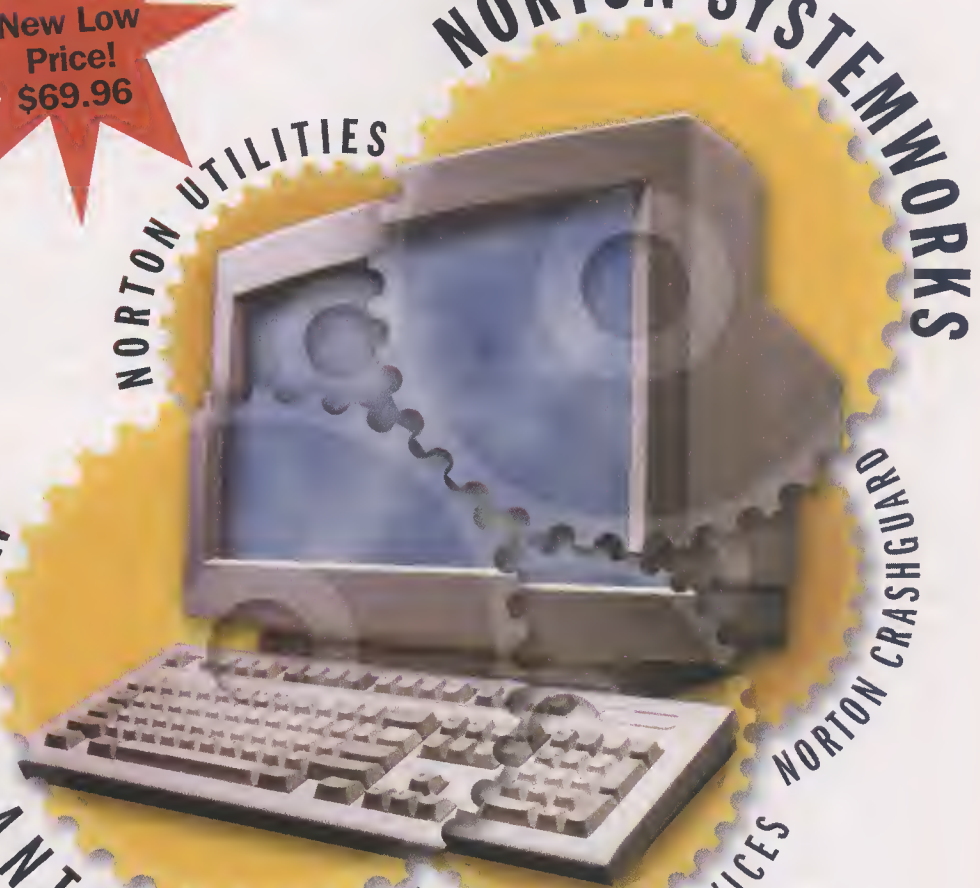
Bottom Line: Recommended. The Presario 2266 includes all the basic features you want in a family computer for a great price. It's the natural choice for families looking for a great value.

FAMILYPC TESTED 89

The Compaq Presario 2266 is a highly integrated, slim-desktop computer based on a low-cost Cyrix processor. The result is a system with good performance for everyday applications that costs just $948 (including a $100 Internet rebate) — a price that includes the cost of a 15-inch multimedia monitor. If your main applications are word processing, e-mail, browsing the Web, and running educational software, this is all the computer you will ever need.

GEAR UP FOR TOP PERFORMANCE

New Low Price! $69.96



SYMANTEC.™

Norton SystemWorks™: The smartest way to keep your computer working

Whether you're an experienced PC user or new to the world of computing, you need utilities. Your computer needs constant maintenance — from optimizing your system to keeping your hard drive clean. It needs protection against viruses and infections. And ways to prevent crashes and resolve conflicts.

That's a lot of utilities. So many that they duplicate functions, sucking up system memory and precious space on your hard drive. Sometimes they even conflict with each other!

Of course, computers ought to function well these days. But since they sometimes don't, you need a single, comprehensive solution that will keep your computer working. A solution that's affordable. A solution that's easy to use.

That solution is Norton SystemWorks. Because it has the very best and most current version of everything you need, Norton SystemWorks is the smartest way to keep your computer working. And Norton SystemWorks is Windows 95 and Windows 98 compatible.

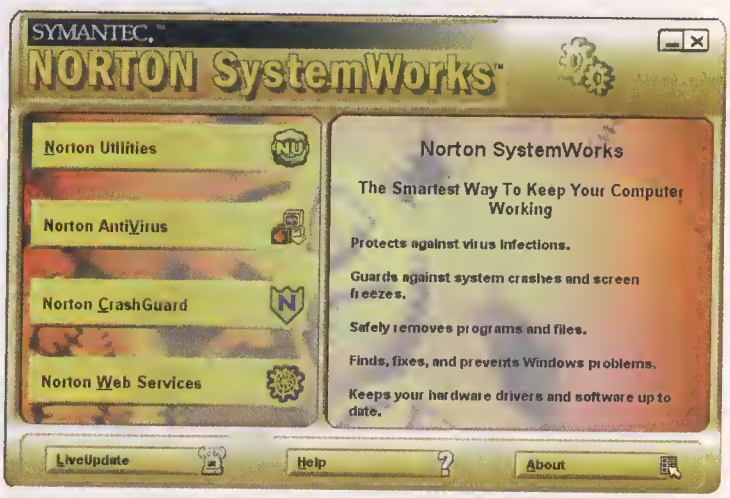
What makes Norton SystemWorks the best?

Norton Utilities™ – the #1 problem-solving software for over 15 years and the industry leader in detecting, repairing and preventing major and minor computer problems. Offering unrivaled power and control, it optimizes your computer to run at peak efficiency, detecting Windows problems in the background and solving them with intelligent repair capability.

Norton AntiVirus™ – the #1 anti-virus program in the U.S. and in the world, recommended by users more frequently than any other product of its kind. It updates itself automatically and works in the background to eliminate today's and tomorrow's viruses, no matter where they come from.

Norton CrashGuard™ – automatic protection against PC crashes and screen freezes that's three times as effective as any other program. Using award-winning Norton technology to find and solve your disk problems, Norton SystemWorks includes software that detects and solves software problems behind the scenes without slowing you down.

Norton Web Services™ – a web service that locates and helps you install any



Four award-winning Norton products integrated to work as one.

To purchase Norton SystemWorks online or to locate a list of resellers visit us

hardware drivers and software updates specific to your system. It detects the software and hardware installed on your computer, then uses the power of the Internet to check your needs against Symantec's up-to-the-minute database containing thousands of patches, drivers and application add-ons.

Norton SystemWorks is integrated

Only Norton SystemWorks offers you an award-winning, best-of-breed collection of utilities — and you can click it all into action from a single, integrated Norton SystemWorks screen.

Because Norton SystemWorks is so tightly integrated, it's easy to install and easy to launch. All the utilities included in Norton SystemWorks are designed to work compatibly with each other and duplicate functionality has been eliminated. Moving from one utility to another — say, from Norton AntiVirus to Norton Utilities — is as simple as clicking a button on your screen. What's more, Norton SystemWorks features like CD Start and Launch Pad make it exceptionally easy to use.

Just one purchase buys you all the functionality you need for system problem-solving and optimization, virus protection, maintenance and crash protection.

Easy to install with the CD Start screen.

Norton SystemWorks runs the way you want it to

Whether you want it to work automatically in the background or you want to customize it to adapt to your level of expertise, Norton SystemWorks can accommodate your needs. Norton SystemWorks can be customized for the perfect fit between you and your computer.

And if you're already using other Norton products, it's easy and affordable to move up to Norton SystemWorks.

Norton SystemWorks is an excellent value

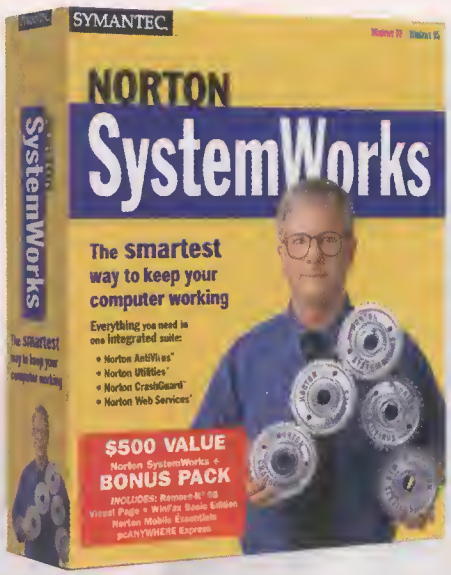
Norton SystemWorks also comes with a FREE Bonus Pack CD including the following stand alone products: Remove-It® 98 — safely removes old applications and other unneeded files, Norton Mobile Essentials™ — to resolve laptop connection problems, Visual Page™ — a web development tool for building, deploying, and managing personal web pages, WinFax™ Basic Edition — to send and receive faxes directly from your computer, pcANYWHERE™ Express — to remotely access PCs, applications and information from your web browser.

Just one purchase buys you four award-winning products and a free Bonus Pack. A total retail package valued at $500 for one great price — $69.95*. And if you own any Norton, Symantec or competitive product (Nuts & Bolts™ 98, Nuts & Bolts™ Deluxe, VirusScan™, FirstAid™, or Uninstaller™) you can get a $10 mail-in rebate from Symantec when you purchase Norton SystemWorks. Nothing beats Norton SystemWorks. It's a convenient, one-box solution with all of the most current and effective PC utilities.

Norton SystemWorks. The smartest way to keep your computer working.

*Manufacturer's suggested retail price

on the web at: www.shop.symantec.com/nsw10buy.html SYMANTEC.™



NORTON Utilities
NORTON AntiVirus
NORTON CrashGuard™
NORTON Web Services

One Suite Way to Gear Up for Top Performance.

Introducing Norton SystemWorks.™ Complete versions of the latest award-winning utilities for Windows® 95 and Windows® 98 from Symantec™ Corporation – now available for the first time ever in a single integrated suite. Geared to work together, they eliminate the confusion of choosing from all the different utilities on the shelf. Just shift up to Norton SystemWorks and you have everything you need.

The smartest way to keep your computer working. Norton SystemWorks protects, maintains, fixes and fine-tunes your system. Easily customized, you can choose whether you want Norton SystemWorks to run automatically in the background, or personalize it to suit the way you prefer to manage and maintain your system.

An incredible value. Along with complete versions of four award-winning utilities, Norton SystemWorks features a FREE Bonus Pack that includes Remove-It 98,® Norton Mobile Essentials,™ Visual Page,™ WinFax™ Basic Edition, and pcANYWHERE™ Express. $500 worth of software for just $69.95!* More than 30 million customers have relied on Norton products to protect their computers. And at this price, shouldn't you?

Gear up for top performance. Go to your local reseller to get four award-winning utilities plus a FREE bonus pack for one amazing price – just $69.95!

*Manufacturer's suggested retail price.

SYMANTEC.™

Symantec, the Symantec logo, Norton AntiVirus, Norton Utilities, pcANYWHERE, and WinFax are registered U.S. trademarks of Symantec Corporation. Norton, Norton SystemWorks, Norton CrashGuard, Norton Web Services, Norton Mobile Essentials, and Symantec Visual Page are trademarks of Symantec Corporation. Remove-It is a registered trademark of Quarterdeck Corporation. Windows, and the Windows logo are registered trademarks of Microsoft Corporation. All other brand names or trademarks are the property of their respective owners. © 1998 Symantec Corporation. All rights reserved.

From the outside, the Presario 2266 is a space-saving small desktop box that fits neatly under a 15-inch monitor. Opening it up reveals an unusual design based on a 225-MHz Cyrix M II-300 processor and SIS-5598 chipset. The M II-300 has 64KB of internal cache, and the Presario 2266 supplements this with 512KB of secondary cache. The SIS-5598 chipset also includes 2-D graphics hardware that partitions the system's 64MB of RAM between system and graphics memory. As shipped, the Presario 2266 has 4MB of graphics memory, so you've got 60MB of usable system RAM.

Our performance tests placed the Presario 2266 behind the other low-cost systems in this review, but its performance is acceptable for running general-purpose applications. Of course, with no 3-D graphics hardware the Presario 2266 doesn't make much of an arcade game machine. Its limited expansion options also make it a poor choice if you're looking for a low-cost system that you can later upgrade.

The Presario 2266 has the same solid multimedia components as the Presario 5050, including JBL speakers, positional sound hardware, and a 32x CD-ROM drive. It also has a good basic software bundle (Works, Encarta, Money, Bookshelf) and a keyboard with multimedia control buttons.

Compaq, *800-345-1518, www.compaq.com; $948.*

Low Rider The slim Presario 2266's integrated design saves space.

HP Pavilion 6355

A PC That Grows with You

Bottom Line: Recommended. The Pavilion 6355 has better core performance and more room to upgrade than the Presario 2266. If you're looking for a bargain today with an eye on tomorrow, this computer fits the bill.

The Hewlett-Packard Pavilion uses the same processor — the 333-MHz Celeron — as the Compaq Presario 5050, but the resemblance ends there. The Pavilion 6355 includes all the computing necessities your family needs but few of the extras you get with the Presario 5050. If you don't need — or can't afford — the extras, you can save yourself a couple of hundred dollars and buy the $1198 Pavilion.

Deal Maker HP's Pavilion 6355 offers good performance at an exceptional price.

HP's system backs up its Celeron CPU with 64MB of SDRAM and a 4GB hard drive, in contrast to the 96MB of system RAM and 8GB drive of the Presario 5050. More noticeable, the Pavilion 6355 includes no 3-D graphics acceleration hardware, so it isn't a good choice if you want to play 3-D games. Nevertheless, the Pavilion 6355 does a good job running productivity applications and is fast enough for multimedia titles and strategy and family games.

The Pavilion 6355's audio includes a wavetable sound card with Surround Sound support and good, though low-power, Polk Audio speakers that hook onto the 15-inch Pavilion monitor. HP includes a 24x CD-ROM drive instead of the 32x units bundled with all the other machines, but we found no noticeable dif-

Budget Systems: Comparison Shopping

All systems come with a 15-inch monitor, speakers, software, multimedia keyboard, and 56-kbps modem.

	Score	Price	CPU	RAM	Hard disk	CD-ROM	Extras	Comments
Compaq Presario 5050	93	$144B	333-MHz Celeron	96MB	BGB	32x	3-D AGP graphics, positional 3-D audio	Most expensive, but with the best features; passable game system
Packard Bell Platinum 7800	90	$1198	350-MHz Pentium II	64MB	6.4GB	32x	BX chipset, 3-D AGP graphics, best software bundle	Great performance for a sub-$1500 system; best core components
Compaq Presario 2266	89	$94B	225-MHz Cyrix M II-300	60MB	4GB	32x	Positional 3-D audio	Least expensive and lowest-performing; still does a fine job on general-purpose applications
Hewlett-Packard Pavilion 6355	B6	$1198	333-MHz Celeron	64MB	4GB	24x	None	Though $250 less than the Presario 5050, it is nearly as fast; no special extras

ference in CD-ROM playback speed. Like its hardware, the Pavilion 6355's software bundle focuses on the basics (Works, Quicken, Encarta), although there are some nice family customizations such as a sharp-looking custom Web browser and HP Personal Guide introductory software. ***Hewlett-Packard,*** *800-724-6631, www.hp.com; $1198.*

Steve Apiki *is a* FamilyPC *contributing editor. You can reach him at apiki@apsol.com.*

High-Powered PCs

Comtrade DVD Family Best Buy 450

Everything but the Kitchen Sink

Bottom Line: Recommended. If you can work around a difficult setup and limited documentation, and you're shopping for a scanner and a printer, too, then Comtrade's package is a best buy indeed.

What, No Desk? A scanner and ink-jet printer complete the powerful DVD Family Best Buy 450.

FAMILYPC TESTED 88

Comtrade's 450-MHz Pentium II system includes a capable Plustek flatbed scanner and Lexmark 5700 color ink-jet printer. Its excellent performance and unbelievable $2399 price tag make it an easy recommendation. Be aware, however, that this mail-order system has a complicated setup, no color-coded connections, and a lot of little booklets to sift through. Don't expect a quick and easy setup.

Like all 450-MHz Pentium II systems, the Comtrade features the Intel 440BX chipset, a 100-MHz system bus, and AGP graphics. It comes with 128MB of memory, a fast 10GB hard disk, and midrange Matrox MGA G200 3-D graphics. The Comtrade ties the Dell Dimension XPS R450 with the highest score we've seen on the WinBench 98 benchmark, which measures system performance for productivity applications.

For extras, the DVD Family Best Buy 450 has a 19-inch monitor, a 4.8x DVD-ROM drive, a Zip drive, wavetable sound, and nice-sounding Benwin speakers and subwoofer. The slim software bundle includes Lotus Smart Suite and a few games.

—Steve Apiki

DVD Family Best Buy 450, 450-MHz Pentium II, 128MB SDRAM, 10GB hard drive, 19-inch monitor, 56-kbps fax modem, 4.8x DVD-ROM drive.

Comtrade, *800-969-2123, www.comtrade.com; $2399.*

IBM Aptiva SE7

Eye-Popping PC

Bottom Line: Recommended. The Aptiva SE7 won't give you the best high-end performance dollar for dollar, but it's without a doubt the best-looking system you can buy.

Stylin' SE7 IBM's Aptiva SE7 has the computing power to go with its good looks.

FAMILYPC TESTED 87

IBM's $3078 Aptiva SE7 is an eye-popping PC that doesn't skimp on performance or features — or price. If you're tired of ugly beige boxes, you'll love the Aptiva's sleek, black SE7.

The Aptiva SE7 is more than just a good-looking black tower case, gorgeous 19-inch monitor, and matching peripherals. Under the hood is a 450-MHz Pentium II processor with a 100-MHz system bus, 128MB of system RAM, and IBM's massive 16.8GB hard drive. One drawback is the midrange 3-D graphics hardware; at this price you should expect high-end graphics.

The Aptiva SE7 includes a headset microphone and IBM's ViaVoice dictation software, which enters text as you speak. Other cool features include great-sounding Infinity speakers, a color-coded multimedia control keyboard, and an excellent family software bundle.

—Steve Apiki

Aptiva SE7, 450-MHz Pentium II, 128MB SDRAM, 16.8GB hard drive, 19-inch monitor, 56-kbps fax modem, DVD-II ROM drive.

IBM, *800-426-2968, www.pc.ibm.com; $3078.*

Notebook Computers

Gateway Solo 3100XL

Lightweight Style

Bottom Line: Recommended. The $2999 price tag is not for the faint-of-finance. But if you value mobility and power equally, this may be the notebook for you.

FAMILYPC TESTED 89

If you need a notebook PC but want to keep it light, consider the stylish two-tone Gateway Solo 3100XL. The tiny 3100XL fits in a backpack or briefcase, but this $2999 notebook is no lightweight when it comes

Dogz 3 Catz

NEW!

your virtual Petz™

Create a Family

Create your own family of Petz! Watch newbornz develop their own unique looks and personalities! Trade and download even more!

Clothe Your Petz in Style

Now with tons of Accessories and Clothing!

Explore New Play Scenes

Explore the Beach, Backyard, Kitchen, Family Room, and many other fun scenes!

Dogz & Catz Play Together

Buy both Dogz 3 and Catz 3, and all your Petz can live and play together! You'll get more Toyz, Treatz, and Petz!

GeoCities

Plus: Includes the Petz Publisher and Petz Web Fun Pack!

Show your Petz to the world with your FREE Home Page on GeoCities – the world's largest home page community!

www.geocities.com

MINDSCAPE

www.petz.com

Grreat Gifts. Purrfect Presents!

The world's most popular virtual Petz are back on your computer desktop! Dogz 3 & Catz 3 now have Families of their own, Play Scenes to explore, and cool new Accessories and Clothing! Raise, train and breed an entire family of Petz without needing kitty litter or a pooper scooper!

Join Over 2 Million Petz Owners – Adopt your Dogz and Catz today!

Visit your local retailer, call **1-800-48-ADOPT** or go to www.petz.com

Includes PLUSH TOY!

Includes PLUSH TOY!

Dogz 3/Catz 3 sold separately. The new Dogz 3/Catz 3 (Win 95/98) and Dogz II/Catz II (Win 95); The original virtual Petz - Dogz, Catz (for Mac, Win 3.1, Win 95); Available Now!

©1998 The Learning Company, Inc. and its subsidiaries. All Rights Reserved. Petz is a trademark, and Catz, Dogz and PF.Magic are registered trademarks of Mindscape, Inc. PF.Magic is a brand of Mindscape, Inc.

Two-Tone The Gateway 3100XL cuts a dashing figure on the road.

to performance, features, or price.

The notebook features a 300-MHz Pentium II processor, a bright, 12.1-inch TFT display, 64MB of SDRAM, a 4GB hard drive, a DVD-II ROM drive, and an internal 56-kbps modem. The only significant drawbacks are an external floppy drive you connect to the notebook's parallel port, and an eight-cell lithium-ion battery that yields just over 2 hours of battery life.

The Gateway Solo 3100XL represents the most computing power we've seen in such a small package. *—Dan Muse*

***Gateway,** 800-846-4875, www.gateway.com, $2999.*

IBM ThinkPad i1450

Big, Beautiful Display

Bottom Line: Recommended. The ThinkPad i1450 is beautiful to look at, comfortable to use, and priced for a family budget.

Although IBM cuts corners on processor speed and battery life, the ThinkPad i1450's beautiful active-matrix display, comfortable design, and $1999 price make it a Recommended notebook.

The i1450's 266-MHz Pentium MMX processor is a few generations behind the Pentium II processors, but it still turned in decent performance results. Other features include an integrated 20x CD-ROM drive and 3.5-inch floppy drive module, a 4.3GB hard drive, a built-in 56-kbps modem, slick 1-inch strip speakers that frame the display, four programmable hot keys, and a convenient front-mounted volume dial.

The notebook's best feature is a beautiful 13.1-inch active-matrix display. In addition, the comfortable keyboard provides ample room to rest your wrists while you type, and it comes with the traditional IBM pointing stick input device (which resembles a pencil eraser wedged among the *G*, *B*, and *H* keys).

The 7.7-pound i1450 uses a nickel-metal-hydride battery rather than the lighter, longer-lasting lithium ion batteries used in top-tier notebooks. We got about 1.5 hours of life between charges. *—Dan Muse*

***IBM,** 800-426-3333; www.pc.ibm.com, $1999.*

Pretty Picture The $1999 ThinkPad i1450 sports a beautiful display and angular design.

Cyber Deal The WinBook XL 233/DS offers attractive pricing for online shoppers.

WinBook XL 233/DS

Disappointing Display

Bottom Line: While the XL 233/DS has an eye-catching online price, its poor display keeps us from recommending it.

WinBook wants you to order its XL 233/DS notebook through its Web site — so much so that you'll save $175 if you order online rather than over the telephone. Still, the notebook's attractive price ($1199) doesn't make up for its average features and poor-quality display.

The 7.3-pound XL 233/DS features a reasonable 233-MHz Pentium CPU, 32MB of RAM, and a smallish 2.1GB hard disk. It comes with both the floppy and CD-ROM drive built in (no swapping one drive for the other), a comfortable keyboard, and a familiar trackpad. While the $1199 XL 233/DS won't blow your socks off with sizzling performance, it does fine with productivity and multimedia software.

The big trade-off is the dual-scan display, which shows a lot of cursor ghosting and is hard to view at any angle other than straight on.

Capture the Moment.

Then SHOW It.

Kai's Power SHOW is an unbelievably powerful home photo player. Just develop your 35mm film onto CD-ROM, or use a digital camera or scanner, then create captivating photo shows in no time with SHOW. Choose from SHOW's special effect transitions, TV-like text animations, and sound effects to produce multimedia shows with pizzazz. Share your favorite photos with family and friends using your computer monitor, E-mail, the Web, and more.

"Your digital images deserve a stage where they can strut their stuff; for our pics, Power SHOW is our pick."
FamilyPC, October 1998

THE WORLD'S MOST POWERFUL DIGITAL IMAGING SOLUTIONS...

MetaCreations
GET CREATIVE

To order, please call or visit us on the Web.
800-846-0111 dept. 572
www.metacreations.com

MICRO CENTER · Fry's ELECTRONICS · COMPUSA THE COMPUTER SUPERSTORE · BEST BUY

©1998 MetaCreations Corp. Kai's Power SHOW and MetaCreations are trademarks of MetaCreations Corp. All other trademarks are the property of their respective owners. All rights reserved.

If you can spend an extra $200, you're better off with Toshiba's $1399 Satellite 33CDS. It offers a faster processor, twice the hard drive space, and a superior display, along with an excellent reputation for quality. *—Dan Muse*

WinBook, *800-651-4518, www.winbook.com; $1199 (order from Web site).*

Digital Imaging

Storm ImageStudio VF

Two-in-One: Scan and Video Capture

Bottom Line: Recommended. If you think you might want to capture video images even occasionally, then the well-priced ImageStudio VF makes perfect sense.

FAMILYPC 89 TESTED

Storm's ImageStudio VF, the first flatbed scanner that can also capture single frames of video from your camcorder or VCR, features a compact design and a software bundle with excellent creative and video software. The $199.99 ImageStudio VF earns a *FamilyPC* Recommended score for its attractive combination of fun, features, and value.

A capable 600- by 600-dot-per-inch scanner with 36-bit processing, the ImageStudio VF stands out for its video-capture capability. You simply connect any video device (such as a camcorder, VCR, or DVD player) to the scanner's composite video or S-video interface, and the ScanBank software captures a single video frame as readily as scanning a photo or document page. Storm includes a good software mix, including Adobe PhotoDeluxe and a suite of Internet software.

Beyond the novelty of the built-in video capture, the compact ImageStudio VF is just 2.3 inches thick, has seven-day-a-week telephone support, and comes with both parallel and USB port connections.

—Jon Pepper

Storm Technologies, *888-438-3279, www.stormtech.com; $199.99.*

A Twofer Storm's ImageStudio marries a scanner with a built-in video-capture device.

One for All These 2-D/3-D cards from Diamond, STB, and Guillemot satisfy casual and rabid gamers alike.

New 2-D/3-D Cards Let Gamers Have It All

Buying a 3-D graphics card to speed up your favorite games just got easier. The new generation of 2-D/3-D cards cost less but offer power to spare by combining a huge 16MB of memory, single-slot convenience, moderate price, and excellent 2-D performance with 3-D performance. Who says you can't have it all?

Guillemot Phoenix

3-D for the Masses

Bottom Line: Recommended. The Phoenix is an outstanding value for the game player who values entertainment more than cutting-edge performance.

FAMILYPC 93 TESTED

The Guillemot Phoenix rises out of the pack of graphics accelerator cards with a refreshing price. But just because this $89.99 PCI card is light on price doesn't mean it's light on power.

The 16MB Phoenix is based on the Voodoo Banshee chip, the 2-D/3-D version of the chip that powers 3-D-only cards like the muscular Diamond Monster 3D II and Creative Labs 3D Blaster Voodoo2. Plus, the Phoenix's Voodoo2 lineage makes it compatible with tons of games.

While the Phoenix is slower than 3-D-only graphics cards when processing texture-rich games such as Quake II, it's faster with less complex games. The bundled software includes Half-Life Day One and Tonic Trouble Special Edition. It also includes playable demos of Incoming, Hexen II, Redline Racer, S.C.A.R.S., Sub Culture, Star Wars: Shadows of the Empire, and Star Wars: Jedi Knight Dark Forces II.

The Phoenix doesn't offer as many features or as much power as the other cards reviewed in this roundup, though it is reasonably close. Its Voodoo compatibility, however, guarantees almost universal game support. *—Sheldon Leemon*

Guillemot, *877-484-5536, www.guillemot.com; $89.99 (with $20 rebate).*

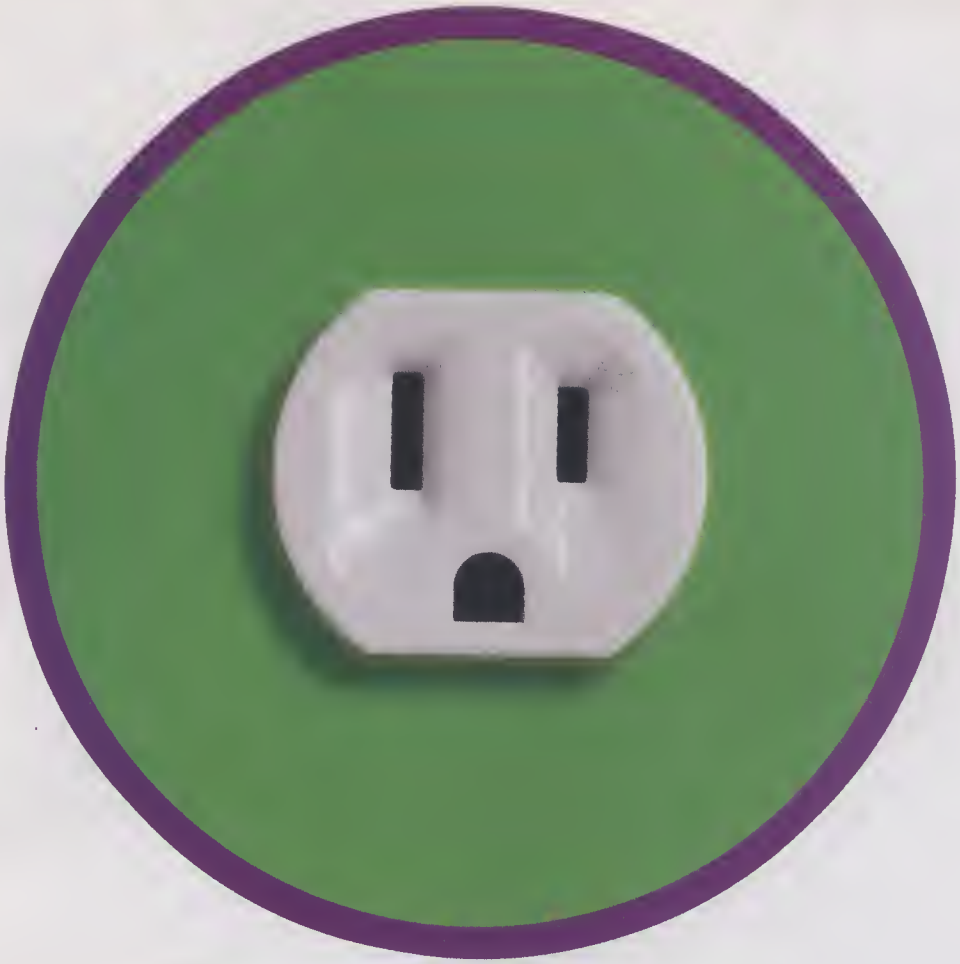
STB Velocity 4400

High-Performance 2-D/3-D

Bottom Line: Recommended. The fast, powerful, and affordable Velocity 4400 will appeal to anyone who's looking for better gaming performance.

FAMILYPC 90 TESTED

The powerful STB Velocity 4400 combines 16MB of graphics memory with state-of-the-art 2-D and 3-D graphics to make productivity programs more responsive and game play more realistic. Based on the



GUESS WHO HAS THE POWER TO NETWORK?

Introducing the PassPort™ Plug-In Network.™ Now any AC outlet is an instant network connection.

Networking doesn't get much easier than this. Because now you can create an instant network using nothing more than your electrical outlets and the PassPort Plug-in Network. There are no additional wires to run, no holes to drill, no intimidating cards to install in your PCs.

Simply connect the parallel cable from your PC or printer to your PassPort Plug-in adapter, plug it into any electrical outlet, load the software, and you're done. It's that simple. In no time at all you'll be able to share a single Internet connection, printers, files or multi-user games between two or more PCs. All through the AC wiring already installed in your home or office.

PassPort PLUG-IN NETWORK™

To learn more about how easy—and affordable—the PassPort Plug-In Network really is, visit our Web site today at www.intelogis.com/6. Call toll-free 1-877-INTELOGIS, or stop by any CompUSA, Staples, Fry's or Tech Data. And unleash the power to network.

Save $20 with mail-in rebate.

Offer expires December 31, 1998.

intelogis. POWERLINE NETWORKING

©1998 Intelogis,™ Inc. All rights reserved. PassPort,™ Plug-in Network,™ PC Plug-In,™ Printer Plug-In,™ and Powerline Networking™ are trademarks of Intelogis, Inc. All other names are trademarks of their respective holders.

Riva TNT chip, the $199 STB Velocity 4400 offers dynamic performance at an affordable price.

The card's 3-D performance is impressive: The Velocity 4400 runs graphics-intensive games like Quake II at frame rates similar to those of high-end 3-D-only boards such as Diamond's Monster 3D II and Creative Labs' 3D Blaster Voodoo2. On less demanding 3-D games, the Velocity 4400 runs even faster than the 3-D-only boards.

We like the Velocity 4400's control software that lets hard-core gaming fanatics squeeze the last drop of performance out of a favorite game. The software bundle includes the full versions of Forsaken and Asymetrix Digital Video Producer.

Available in both PCI and AGP versions, the Velocity 4400 also comes with TV output so you can play games on the big screen. —*Sheldon Leemon*

STB Systems, *972-234-8750, www.stb.com; $199.*

Diamond Viper V550

Virtual Twin

Bottom Line: Recommended. If you'd rather just play and not worry about extracting every last drop of power, you should buy the Viper V550.

FAMILYPC 90 TESTED

The Viper V550's design is so similar to that of the Velocity 4400 that its performance characteristics are almost identical. It sells for $199.95, sports 16MB of video memory, is based on the Riva TNT chip, and shares the same performance scores. The difference between the two cards is in the software that controls each card and in the bundled software.

The Viper's control program, Diamond's In Control Tools, adds convenient features and shortcuts, such as left-button Start Menu pop-ups, but no accelerator adjustments other than gamma (brightness) controls. The Viper's software bundle has a slight edge, though. It includes the full version of Motorhead, Microsoft's Windows 98 game sampler, MGI Photosuite SE graphics software, Software DVD (AGP only), and 3-D business graphics software.

Both cards perform well and can handle just about any gaming requirement. It boils down to your needs. If you're heavily into gaming, you'll appreciate the performance tweaking you can do with the Velocity 4400. —*Sheldon Leemon*

Diamond Multimedia, 800-468-5846, www.diamondmm.com; $199.95.

A Threefer The Marvel G200-TV accelerates graphics, captures video, and puts TV on the PC.

Video Editing...and More

Matrox Marvel G200-TV

2-D/3-D, TV, and Video Editing

Bottom Line: Recommended. If you want to tame your home videos, have another TV, and get the most out of your PC graphics, the Marvel makes a marvelous choice.

FAMILYPC 92 TESTED

The $299 Marvel G200-TV provides the easiest way to edit video we've seen, and includes other popular features such as 2-D/3-D graphics acceleration and a TV tuner.

The Marvel consists of the 8MB Matrox Mystique G200 2-D and 3-D graphics accelerator card (see December Hardware Reviews), an external, paperback-size video box (for connecting VCRs and camcorders), and the software bundle. The Marvel box also doubles as a TV tuner: You can plug in your cable and watch TV on your PC, or set the software to view your video source. Whether it's a TV, camcorder, DVD, or VCR, the Matrox Marvel lets you record all the video clips you like and save them to disk.

Matrox bundles Avid Cinema, an easy-to-master application. Follow the steps and you'll soon have a seamless video complete with titles and soundtrack. As with all video editing, you'll need a lot of hard drive space. Even highly compressed digital videos require a minimum of 11MB per minute of footage. Ultimately, saving the edited video onto standard VHS tape is your best bet if you want to share your work with an audience.

The Marvel G200-TV provides three tools in one well-priced package.

—*Eric Griffith*

Marvel G200-TV, *800-361-1408, www.matrox.com; $299.*

At a Glance: 2-D/3-D Cards

	Score	Price	Quake II frames per second, 640 by 480 pixels	Quake II frames per second; 800 by 600 pixels
Guillemot Phoenix	93	$89.99	49.7	41
STB Velocity 4400	90	$199	53	51
Diamond Viper V550	90	$199.95	53.1	51

Performance tests were run on a 300-MHz Pentium II system with AGP graphics.

TRI

TERMINAL REALITY INC

THE AIRCRAFT YOU ARE ABOUT TO FLY IS FULLY OPERATIONAL. IF ACTUAL PLANES HAVE IT, SO DOES DUKE. IT'S THE MOST REALISTIC CIVILIAN FLIGHT SIMULATOR EVER CREATED FOR THE PC. YOU HAVE BEEN CLEARED FOR TAKEOFF.

"FLY! IS SET TO ADVANCE THE CIVILIAN FLIGHT SIM BY TWO GENERATIONS."
- *COMPUTER GAMING WORLD*

10.01

EPIC MEGAGAMES

FROM THE CREATORS OF UNREAL™ COMES THE HILARIOUS SEQUEL TO THE 1994 ARCADE GAME OF THE YEAR. PLAY AS JAZZ OR HIS SPACED-OUT BROTHER, SPAZ, WHILE YOU TRAVEL THROUGH TIME AND TAKE ON WACKY TURTLES, BIZARRE MONKEYS AND MORE.

"THE BEST SIDE SCROLLING GAME EVER....JAZZ JACKRABBIT 2 IS DESTINED TO BECOME A CLASSIC." - *PCME*

10.02

THE NEW MILLENNIUM IS ALMOST HERE.
THE ENTERTAINMENT HAS ARRIVED EARLY.

T POP
PopTop Software

THIS SEQUEL TO THE LEGENDARY RAILROAD TYCOON CAN TAKE YOU FROM A NORMAL, WELL-ADJUSTED, WELL-ROUNDED PERSON TO AN OBSESSED, ONE-TRACK TRAINHEAD. ALL ABOARD THIS HIGHLY ADDICTIVE STRATEGY GAME.

"RAILROAD TYCOON II COULD WELL BE THE STRATEGY GAME OF THE YEAR FOR 1998."
- *INTELLIGAMER*

10.03

CHECK OUT ALL OF THESE GAMES AT WWW.GOGAMES.COM

ALL TRADEMARKS AND TRADE NAMES ARE PROPERTIES OF THEIR RESPECTIVE OWNERS. © 1998 EIDOS OR ITS LICENSORS. ALL RIGHTS RESERVED.

FamilyPC

The Magazine For Active Computing Families

FamilyPC

Families like yours rate the best in computer hardware, software and web sites.

The connection between home and school-how schools use technology.

For families who love games!

Your Monthly Guide to the World of the Internet

Your guide to Internet entertainment.

Step by step how-to instructions.

Subscribe today at:

http://subscribe.familypc.com/save

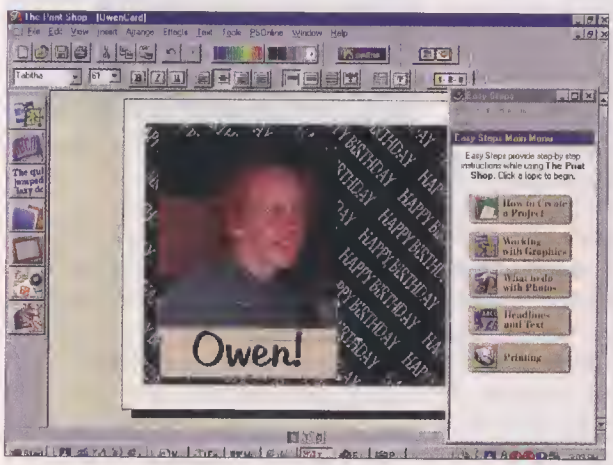
ZIFF-DAVIS
a SOFTBANK company

Fit to Print

111 family testers review and rate five publishing programs **By Philip Bishop**

If your family is like mine, you almost need your own printing press to keep up with communications between family and friends. Fortunately, home publishing programs turn your PC and printer into a mini publishing plant, capable of keeping up with any family's printing needs. These publishing powerhouses let you create and print cards, stationery, newsletters, banners, toys, party favors, and more, and they include tens of thousands of pieces of clip art and hundreds of ready-made projects created by design pros.

Line them up side by side, and the big three home publishing programs — Print Shop, PrintMaster, and Print Artist — look very similar. But when you look a little closer, as 111 of our testers recently did, these heavyweights of home publishing are not as similar as they seem, and each is better suited to a particular user.



Premiere Print Package Print Shop is back on top of the home publishing programs, with tons of new projects and tools.

PHOTOGRAPH: WILLIAM WHITEHURST/STOCK MARKET

Print Shop Deluxe 6.0, the granddaddy of the bunch, is the all-around best home publishing program. It jumps out ahead this year, with new tools (including a Web page builder), art, and a slick interface. PrintMaster is notable for its specialized clip art, including photos from *National Geographic* magazine. Print Artist, which was our FamilyTested top pick in May 1997, features too few enhancements to maintain its top ranking. It received a solid third place in this roundup.

Testers also looked at two full-featured publishing programs aimed at small businesses: Microsoft Publisher 98 and Serif PagePlus 5.0. Publisher 98 is leagues ahead of its competition and ideally suited for small businesses.

Home Publishing Programs

Print Shop Deluxe 6.0

No Need to Shop Further

Bottom Line: Recommended. This is the best all-around home publishing program, featuring an easy interface and great tools, clip art, and premade layouts.

FAMILY TESTED 89

PRINT SHOP 6.0 takes top FamilyTested honors among new home publishing programs because, as testers found, it is supremely easy to use and contains templates and wizards for all the print projects a family will need. It also features more than 100,000 pieces of quality clip art, tools for building Web pages, a photo cataloger, and more.

The developers of Print Shop 6.0 paid close attention to the details. The program is easy to navigate and understand, and it contains many nice touches. For example,

to find clip art in other publishing programs you must scroll through pages of thumbnail images. Print Shop 6.0 features thumbnails as well as a label that pops up and describes the clip art, which you can see at a glance.

Print Shop has all the features you'd expect: over 100,000 graphics — including fine art images and photos — plus over 6600 layouts that you can modify. The package also includes three additional programs: Photo Organizer 1.0, Web Site Designer 1.0, and PressWriter 2.0.

Photo Organizer lets you import photos into ready-made category folders, perform basic retouching, view photos in a slide show, and easily export pictures to Print Shop projects.

Web Site Designer is a slick program for making very simple Web pages that contain text, pictures, and links, but not much more. Although it doesn't have any tools to help you manage your site, it features a wizard to help you easily get your page onto the Web.

PressWriter features tools for creating more complex, business-style print pieces, such as newsletters and reports.

Testers Said: "It's easy to use and has a great selection of graphics." —*Donna Politzi, Oswego, New York*

"I like the Quick Start feature. Sometimes I'm not sure exactly what I want to do, and this gets me going." —*Melanie Ciparik, Jarrettsville, Maryland*

***Broderbund,** 800-567-2610, www.printshop.com; Windows 95 CD, $49.95.*

PrintMaster Platinum 7.0

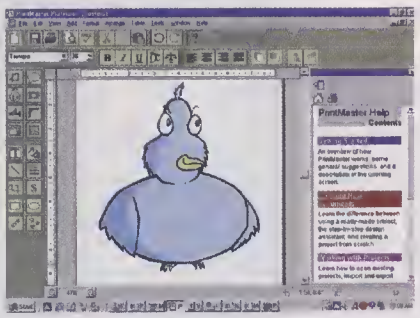
Put Yourself in Pictures

Bottom Line: Recommended. This easy-to-use publishing program contains clip art and projects you are unlikely to find elsewhere, including photos from National Geographic.

FAMILY TESTED 86

When PrintMaster first appeared, it was the ugly duckling of home publishing programs — a clunky interface wrapped around average clip art. What set it apart was its narrated help system. Now it's as easy to use as the rest, and it contains some of the best clip art around.

In fact, PrintMaster includes three exclusive collections of clip art — beautiful National Geographic photos, colorful American Greetings projects, and a collection of original artwork — for a total of about 150,000 images. If you want still more artwork, you can purchase additional art and projects — such as special



Clip-Art King PrintMaster Platinum contains art that you can't find anywhere else.

items related to Christmas or the NFL — through an online link in the program.

PrintMaster 7.0 also includes Serif DrawPlus, BorderPlus, Cartoon-O-Matic, and PhotoEnhancer, four bonus programs that are well integrated into the main program. For example, when you finish working on an illustration in DrawPlus, the program automatically places it in your current project.

Testers thought the Web publishing feature, which lets you create a very basic site, was useful mostly as a place to practice Web site ideas. Several testers were unhappy that PrintMaster automatically installs a copy of Internet Explorer 4.0, which it needs for Web publishing and its Help system.

Testers Said: "Tons and tons of graphics! I used graphics for school, my husband used graphics for his school, my oldest son used graphics for a school project, and my youngest son just likes to print pictures." —*Kim Barham, Portland, Tennessee*

"The wizards are terrific. I used the Web Publisher wizard to do all the work to get me up to the Web through my ISP." —*Tom Adams, Lansing, Michigan*

Mindscape, 617-761-3000, www.mindscape.com; Windows 95 CD, $69.95.

Print Artist Platinum

No Longer at the Top of the Charts

Bottom Line: Print Artist is a capable program – just not as capable as its competition.

FAMILY TESTED 82

When we last reviewed Print Artist, in May 1997, we crowned it the reigning champ among publishing programs. But champions only remain on top if they keep ahead of the competition. Over the past 20 months, testers said, Print Artist has lost ground.

While Print Artist has fine features and excellent clip art, it isn't as easy or as fun to use as the competition. For example, in contrast to Print Shop and PrintMaster, which hold your hand as you build a project, Print Artist features a rather impersonal interface that offers many options but little assistance.

If you need to edit a photo, find an additional craft project for your kids, create a card to send over the Internet, or manage your fonts, Print Artist includes programs to perform these tasks. These add-on programs seem almost like afterthoughts, however, and are not well integrated into Print Artist. Another criticism testers had was that the program lacked

Shaky Ground Testers said Print Artist is good, but no longer the best publishing program.

support for the right mouse button — a handy feature all the other programs have.

Despite these concerns, the twelve-CD-ROM Print Artist Platinum will let you create cards, signs, labels, banners, calendars, and even 3-D crafts. It has 4000 ready-made layouts, 150,000 graphics, 29,000 photos, 300 fonts, and 1000 quotes you can add to your projects.

One eagle-eyed tester noted that when

New SurgeStation™: The Most Advanced Features Ever Designed By Our Customers

"I want to plug a telephone line and a modem dataline into the same surge protector."

"I need more outlets for peripherals."

"I want to plug in transformer blocks and keep all outlets open."

"I need some outlets that are always on."

Order Today!

The Challenge

Surge suppression is vital to the health of your electronic equipment. The SurgeStation™, APC's latest offering, accepts the challenge issued by APC customers to incorporate several "dream features" while maintaining the key elements and high-performance that make SurgeArrest® one of the best selling surge suppressors in the world.

Not all surge protectors are alike

Life presents many risks, most people seek out the best insurance to reduce the threat of these risks, so why would you trust the protection of your PC to some outlet strip? APC is the world leader in power protection; we provide you with premium, reliable surge protection, and the peace of mind that comes from knowing you have the best protection.

All the Features You Wanted

SurgeStation products now include: Eight outlets – three spaced to handle transformer blocks easily, a

SurgeStation also comes in models with built-in telephone and built-in cable and telephone protection.

Building/Site Wiring Fault Indicator

SurgeStation is equipped with a Building/Site Wiring Fault LED that identifies dangerous wiring problems before you plug in your equipment.

Protection Working Indicator

*A Protection Working LED warns you if SurgeStation circuitry is ever damaged. APC will then replace the damaged SurgeStation for free under its lifetime warranty.**

Right-angle Plug

SurgeStation's space-saving plug design allows the cord to be flat against the wall.

8 Outlet Floor Models

Eight outlets on SurgeStation floor models provide ample space for equipment plugs with transformer blocks.

FREE! Guide to Buying Surge Protection

...upon ...action.

KEY CODE i289z

...rotection Buying Guide.

...is time, but please ...ly newsletter mailing list.

...ny: _____

...ntry _____

_____ # _____

_____ # _____

☐ No

Conversion
X: (401) 788-2797

...iability

West Kingston, RI 02892 USA

FREE Guide to Surge Protection!

The SurgeStation™, APC's latest offering, accepts the challenge issued by APC customers to incorporate several "dream features" while maintaining the key elements and high-performance that make SurgeArrest® one of the best selling surge suppressors in the world. Just mail this completed card to APC for your FREE guide to surge protection.

☐ **YES!** Please send me information about new SurgeStation.

☐ **NO,** I am not interested in SurgeStation at this time, but please add me to your quarterly newsletter mailing list.

Name: _____

Title: _____ Company: _____

Address: _____

_____

City/Town: _____

State: _____ Zip: _____ Country _____

Phone: _____

Brand of surge suppressor used? _____ #_____

Brand of PCs used? _____ #_____

Are you familiar with UPSs? ☐ Yes ☐ No

Allow 6 - 8 weeks for delivery.

Please fill in all information completely for prompt service.

http://promo.apcc.com KEY CODE i289z

(888) 289-APCC x8211 • FAX: (401) 788-2797

APC®

AMERICAN POWER CONVERSION

©1998 APC. All Trademarks are the property of their owners. SA01EBRC • E-mail: apcinfo@apcc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA

to find clip art in other publishing programs you must scroll through pages of thumbnail images. Print Shop 6.0 features thumbnails as well as a label that pops up and describes the clip art, which you can see at a glance.

Print Shop has all the features you'd expect: over 100,000 graphics — including fine art images and photos — plus over 6600 layouts that you can modify. The package also includes three additional programs: Photo Organizer 1.0, Web Site Designer 1.0, and PressWriter 2.0.

Photo Organizer lets you import photos into ready-made category folders, perform basic retouching, view photos in a slide show, and easily export pictures to Print Shop projects.

Web Site Designer is a slick program for making very simple Web pages that contain text, pictures, and links, but not much more. Although it doesn't have any tools to help you manage your site, it features a wizard to help you easily get your page onto the Web.

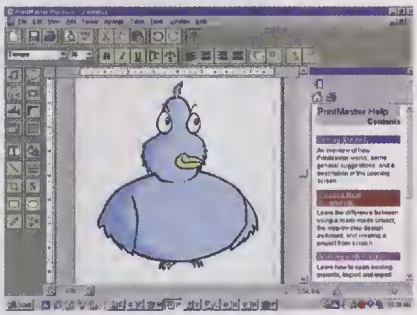
PressWriter features tools for creating more complex, business-style print pieces, such as newsletters and reports.

Testers Said: "It's easy to use and has a great selection of graphics." —*Donna Politzi, Oswego, New York*

"I like the Quick Start feature. Sometimes I'm not s
do, and this ge
Ciparik, Jarrett
***Broderbund,** 80
.com; Windows*

rated help system. Now it's as easy to use as the rest, and it contains some of the best clip art around.

In fact, PrintMaster includes three exclusive collections of clip art — beautiful National Geographic photos, colorful American Greetings projects, and a collection of original artwork — for a total of about 150,000 images. If you want still more artwork, you can purchase additional art and projects — such as special



Clip-Art King PrintMaster Platinum contains art that you can't find anywhere else.

items related to Christmas or the NFL — through an online link in the program.

PrintMaster 7.0 also includes Serif DrawPlus, BorderPlus, Cartoon-O-Matic, and PhotoEnhancer, four bonus programs that are well integrated into the main program. For example, when you finish working on an illustration in DrawPlus,

Print Artist Platinum

No Longer at the Top of the Charts

Bottom Line: Print Artist is a capable program – just not as capable as its competition.

FAMILY TESTED 82

When we last reviewed Print Artist, in May 1997, we crowned it the reigning champ among publishing programs. But champions only remain on top if they keep ahead of the competition. Over the past 20 months, testers said, Print Artist has lost ground.

While Print Artist has fine features and excellent clip art, it isn't as easy or as fun to use as the competition. For example, in contrast to Print Shop and PrintMaster, which hold your hand as you build a project, Print Artist features a rather impersonal interface that offers many options but little assistance.

If you need to edit a photo, find an additional craft project for your kids, create a card to send over the Internet, or manage your fonts, Print Artist includes programs to perform these tasks. These add-on programs seem almost like afterthoughts, however, and are not well integrated into Print Artist. Another criticism testers had was that the program lacked

PrintMa

Put
in I

Bottom Line: Reco
publishing prog
projects you are
including photos

FAMILY TESTED 86

When
pearec
of hor
— a clunky inte
erage clip art. W

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 36 WEST KINGSTON, RI

POSTAGE WILL BE PAID BY ADDRESSEE

APC®
AMERICAN POWER CONVERSION
KEY CODE i289z
132 FAIRGROUNDS ROAD
PO BOX 278
WEST KINGSTON RI 02892-9920

New SurgeStation™: The Most Advanced Features Ever Designed By Our Customers

"I want to plug a telephone line and a modem dataline into the same surge protector."

"I need more outlets for peripherals."

"I want to plug in transformer blocks and keep all outlets open."

"I need some outlets that are always on."

Order Today!

The Challenge

Surge suppression is vital to the health of your electronic equipment. The SurgeStation™, APC's latest offering, accepts the challenge issued by APC customers to incorporate several "dream features" while maintaining the key elements and high-performance that make SurgeArrest® one of the best selling surge suppressors in the world.

Not all surge protectors are alike

Life presents many risks, most people seek out the best insurance to reduce the threat of these risks, so why would you trust the protection of your PC to some outlet strip? APC is the world leader in power protection; we provide you with premium, reliable surge protection, and the peace of mind that comes from knowing you have the best protection.

All the Features You Wanted

SurgeStation products now include: Eight outlets – three spaced to handle transformer blocks easily, a new building wiring-fault indicator, a right-angle plug to maximize your work space, and a switch large enough to be pressed on with your foot, but recessed enough to prevent accidental turn-off.

Whether you need basic protection, or the best protection money can buy, APC has a SurgeStation to meet your needs. Each SurgeStation model offers the best protection from lightning strikes and everyday power surges that can cause hardware damage and data loss. Every model carries a lifetime equipment protection policy; if connected equipment is ever damaged by a surge or lightning strike, APC will replace up to $25,000* worth of that equipment. With power problems virtually guaranteed to damage unprotected electronics, you won't find a better protection value.

SurgeStation also comes in models with built-in telephone and built-in cable and telephone protection.

Building/Site Wiring Fault Indicator

SurgeStation is equipped with a Building/Site Wiring Fault LED that identifies dangerous wiring problems before you plug in your equipment.

Protection Working Indicator

*A Protection Working LED warns you if SurgeStation circuitry is ever damaged. APC will then replace the damaged SurgeStation for free under its lifetime warranty.**

Right-angle Plug

SurgeStation's space-saving plug design allows the cord to be flat against the wall.

8 Outlet Floor Models

Eight outlets on SurgeStation floor models provide ample space for equipment plugs with transformer blocks.

For Home Office/Small Office Applications

The SurgeStation series offers premium protection for small business/home office computers, high-performance stereo and video equipment, laser printers, and modems.

So join the over 8,000,000 satisfied computer users who say "ProtectME!" with APC.

Lifetime Equipment Protection Policy

*With the Lifetime Equipment Protection policy, your equipment connected to SurgeStation is protected. (*See policy for details.)*

FREE! Guide to Buying Surge Protection

Just mail or fax this completed coupon for your FREE Guide to Surge Protection. Better yet, order it today at:

http://promo.apcc.com KEY CODE i289z

☐ **YES!** Send my FREE Surge Protection Buying Guide.

☐ **NO,** I'm not interested at this time, but please add me to your quarterly newsletter mailing list.

Name: _____

Title: _____ Company: _____

Address: _____

_____

City/Town: _____

State: _____ Zip: _____ Country _____

Phone: _____

Brand of UPS used? _____ # _____

Brand of PCs used? _____ # _____

Are you familiar with UPSs? ☐ Yes ☐ No

American Power Conversion

(888) 289-APCC x8211 • FAX: (401) 788-2797

SurgeArrest SurgeStation Pro8T2

- Transformer block spacing
- Built-in 2 Telephone line (4 wire) surge protection
- Up to $10,000 Equipment Protection Policy
- Only $39.95

Order Now by calling:

PC Connection®

V1202 **800-600-8352**

Ask for item number 45249. For more information, visit our Web site at http://promo.apcc.com or simply fill out the attached form.

APC®

Legendary Reliability

©1998 APC. All Trademarks are the property of their owners. SA01EF • (800)347-FAXX PowerFax • E-mail: apcinfo@apcc.com • 132 Fairgrounds Road, West Kingston, RI 02892 USA

APC has won more awards for reliability than all other UPS vendors combined.

WIN 100 Windows Magazine 1997 · PC World 20 Best Upgrades · PCCompanion Approved · PC Magazine Editors' Choice

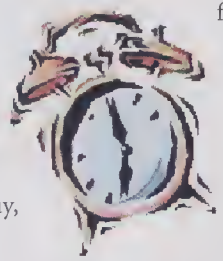
it says on the package that "Print Artist for Kids" is included, it refers in fact to the bonus program Print Artist Craft Factory SE.

Testers were not bowled over by this latest version of Print Artist, although they were pleased by its scope and usefulness. It's still a good buy, they said — but it's no longer the best buy.

Testers Said: "The music is hip, the colors are vivid, and the projects are endless." —*Snow White, Austin, Texas*

"Both children and adults can use it after very little time." —*Tanya Smith, Exton, Pennsylvania*

***Sierra,** 800-757-7707, www.sierra.com; Windows 95 CD, $49.95.*



Time to rise and shine!

Work-at-Home Publishers

Microsoft Publisher 98

For Folks Serious About Style

Bottom Line: Recommended. This full-featured publishing program is one of the most valuable programs you can buy for a work-at-home business.

MICROSOFT PUBLISHER 98 is a solid and versatile desktop publishing program for home and work-at-home business, as well as for school projects in the higher grades. Its slick design tools let you create, among other things, a coordinated look across a number of printed items, including letterhead, envelopes, ads, and business cards.

Like most of Microsoft's other productivity programs, Publisher 98 features a classic Windows interface and makes extensive use of wizards and online help. Users of Microsoft Office products will find it familiar and easy to use. If you need to create projects quickly, you can choose from 1600 templates for newsletters, brochures, flyers, business cards, letterhead, Web sites, and more. An excellent feature of these templates is the Color Schemes — 60 in all — which let you easily apply compatible colors to any publication you create.

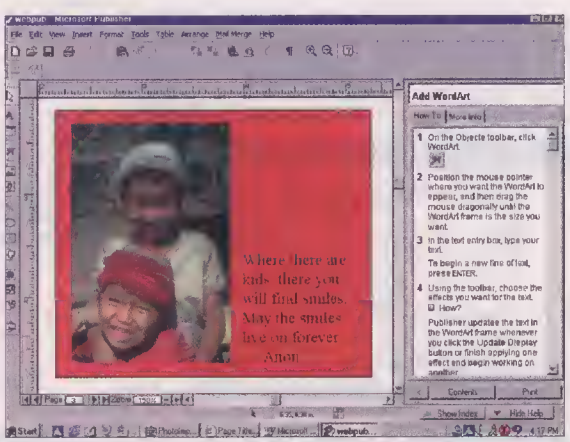
Another time-saving feature lets you create a range of documents — such as a business card, letterhead, and brochure — with a consistent design featuring the same fonts, headline and border styles, colors, and more. Publisher also lets you quickly create tables and — as with Microsoft Word — automatically checks your spelling as you type.

Publisher 98 produces handsome documents with a minimum of fuss. Publisher 2000, which shipped as this issue went to press, contains dozens of enhancements. Its new tools to help you print projects commercially should change the way small businesses get the word out.

Testers Said: "You can use the software to do something as easy as create a card or as hard as make a Web site." —*Tiffany Lum, 10, Buena Park, California*

"So many things are done for you. It walks you through the steps about what you want to do." —*Matthew Marshall, Sr., Belmore, New York*

***Microsoft,** 800-426-9400, www.microsoft.com; Windows 95 CD, $99.95.*



Happy to Help Publisher's nonintrusive help system quickly gets you out of technical and stylistic trouble.

PagePlus 5.0

PagePlus Has Several Minuses

Bottom Line: PagePlus costs the same as Microsoft Publisher 98 but doesn't compare or compete.

AS A DESKTOP publishing program designed primarily for small and home businesses, PagePlus 5.0 goes head-to-head with Microsoft Publisher 98. However, PagePlus is way out of its weight class, said testers, and would find itself flat on its back before the first-round bell sounded.

PagePlus 5.0 is not without merit. It contains 300 templates for such items as brochures, newsletters, and advertisements. It also has 17,500 pieces of clip art and 400 fonts. Even its interface, which at times seems arbitrarily organized, contains valuable components. The Change Bar, in particular, is nicely designed and works well. With this small floating palette you can, for example, quickly change a picture's corner angles, color, and shade, either by selecting values or by dragging slider bars to adjust.

Non Plussed Testers were disappointed by the inconsistencies in Serif PagePlus.

But such originality is in short supply. Almost everything else testers had seen before and seen done better. They especially thought that the templates were often uninspired and that the clip art didn't provide enough variety.

Testers Said: "There are too many other programs that do desktop publishing much better." —*Gregory Berg, Boise, Idaho*

***Serif,** 800-557-3743, www.serif.com; Windows 95 CD, $59.95.*

REAL LIFE
(only better)

take pictures

shoot video

Make the memories really worth sharing.

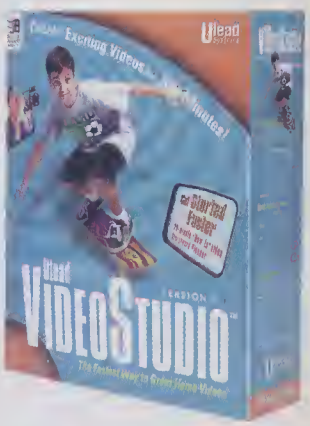
$49.95*

Transform ordinary photos into over 300 exciting, personalized projects you can share as prints, emails, greeting cards, calendars, sports cards, Web pages and much more.

Photo Express is the fast track to photo fun because easy-to-recognize icons replace pull-down menus. Remove red-eye and scratches, brighten, crop and add eye-catching text and special effects all at the touch of a button.

Turn your best video footage into exciting movies to show to your family and friends on tape, CD-ROM, over the Internet, as video email or even as a special video greeting card.

VideoStudio is the fastest way to great home video because it guides you step by step through the editing process. You can easily trim to the best action, add effects, place titles and even do your own voiceover narration.



$99.95*

Go to www.ulead.com/reallife for a chance to WIN a digital video or still camera.

Ulead Photo Express and Ulead VideoStudio are featured at these superstores:

BEST BUY COMPUSA Fry's ELECTRONICS MICRO CENTER OfficeMax

*Estimated street price. © 1992-1998 Ulead Systems, Inc. All Rights Reserved. Ulead, Photo Express and VideoStudio are registered trademarks and the Ulead Systems logo is a trademark of Ulead Systems, which may be registered in certain jurisdictions. All other product names are the property of their respective owners.

Ulead Systems

Innovative Multimedia Solutions

1 (800) 85-ULEAD

"Game of the Year"
–GameSpot Editors

"Game of the Year"
–GameSpot Reader's Choice Awards

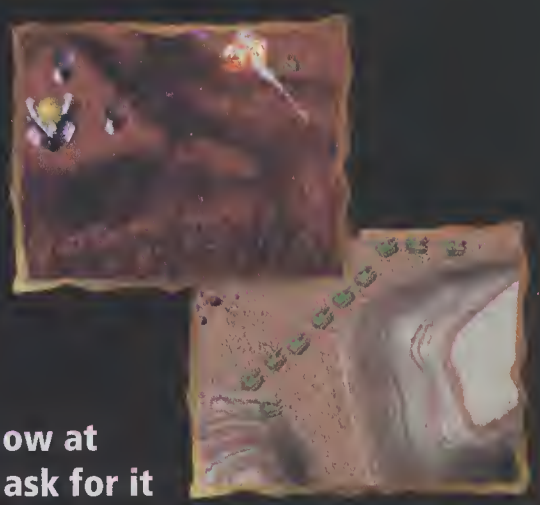
"Best Real-Time Strategy Game"
–PC Gamer On-Line, Reader's Choice Award

"Best Real-Time Strategy Game"
–Adrenaline Vault

"Best Real-Time Strategy Game"
–Ultra Game Player's magazine

Plus over 50 other major awards worldwide!

TOTAL ANNIHILATION™



Download the demo now at www.cavedog.com or ask for it at your favorite retail outlet.

TOTAL ANNIHILATION

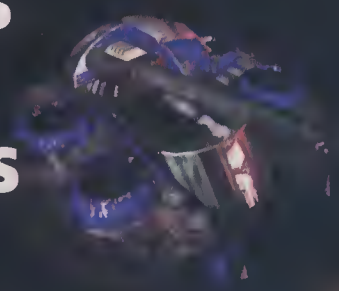
THE CORE CONTINGENCY™

75 New Units

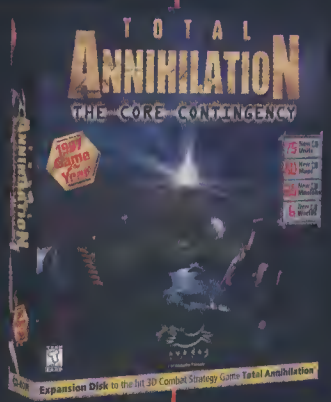
50 New Maps

25 New Missions

6 New Worlds



Experience the real time strategy game that just doesn't quit. **Total Annihilation,** winner of over 50 awards world wide and **Total Annihilation: The Core Contingency,** the second explosive chapter in the world's hottest strategy saga.



CAVEDOG ENTERTAINMENT™
A GT Interactive Company
www.cavedog.com

©1997, 1998 Humongous Entertainment, Inc. All rights reserved. Total Annihilation, Total Annihilation: The Core Contingency, Cavedog Entertainment and the Cavedog Entertainment logo are trademarks of Humongous Entertainment, Inc.

KIDS

Adventures in Typing with Timon & Pumbaa

Kids Love Its Type

Bottom Line: Recommended. A lively and fun typing tutorial with games that help mask the repetitious nature of typing practice.

FAMILY PC 88 TESTED

Timon and Pumbaa, the jungle jesters from *The Lion King*, are itching for an adventure. With your child as their guide, no one even notices that the fun revolves around boring old typing practice. Adventures in Typing is visually appealing, with lush jungle backgrounds and fluid animations. And when it comes to personality, the program is loaded — its wisecracks, sound effects, and sight gags will keep kids giggling as their fingers are wiggling.

Adventures in Typing features well-designed lessons centered around standard typing drills, starting with practice on the home row and moving on to other keys after kids show proficiency. Kids must finish a series of drills before they move on to games in which Timon and Pumbaa shoot berries at bugs, slake their thirst at an old water pump, and munch grubs by a waterfall as your child types the correct letters.

Adventures in Typing's structure is kid-friendly: Lessons are short, sweet, and manageable, and are always followed by engaging games. Throughout the program, Rafiki the baboon host gives advice that's tailored to kids. The first lesson, for example, involves proper posture, and here Rafiki advises kids to keep their feet on the floor — if they can. The tone is just right, too — not too formal, not condescending.

Adventures in Typing is a super program for kids, and parents may well find it succeeds where other typing programs — especially adult-oriented programs claiming to work for kids as well — have failed. *—Cristine Santo*

***Disney Interactive,** 800-900-9234, www.disneyinteractive.com; Mac and Windows CD, $34.95; ages 6 and up.*

Finger Fun Arcade-style games with Timon and Pumbaa take the torture out of typing drills.

Learn to Program BASIC

Get with This Program

Bottom Line: Recommended. Humor helps junior high kids learn how to write computer programs.

FAMILY PC 88 TESTED

Learn to Program BASIC eases your middle-schooler into computer programming by making extensive — and very successful — use of humor.

The BASIC programming language is not as widely taught or used as it was a few years ago. Nevertheless, it is a great introduction to programming, and the tone of this tutorial makes it fun to learn. A screen doesn't just fade to black in this program; instead, Civil War soldiers blast it away or a cruise ship rams through the screen. When discussing variables, the program cuts away to "The Variable Show," a brief skit that explains the subject in the style of a game show. The host of Learn to Program BASIC — Media Man — is himself a fun animation.

Beyond the silliness, the program addresses serious stuff. Learn to Program BASIC contains 10 half-hour animated lessons that take your child step-by-step through the basics of BASIC. The information is supplied in bite-size chunks, and your child can take as long as he wants to digest each morsel. He actually starts programming in the first lesson.

The CD-ROM contains more than 50 exercises and 10 projects in which your child can modify games to help reinforce what he has studied in the tutorial section. Kids can also compare and share ideas and get help from other students through Interplay's Web site.

BASIC Needs Fun and games help introduce kids to programming using the BASIC programming language.

Using this disc your child can gain a better understanding of how computers work. The discipline and logical thinking required to master BASIC can be applied to all areas of learning. *—Philip Bishop*

***Interplay,** 800-468-3775, www.interplay.com; Mac and Windows CD, $29.95; ages 10 and up.*

KidSpeak

Parlez Vous Español?

Bottom Line: Recommended. A colorful smorgasbord lets kids ages six and up get a taste of 10 languages.

FAMILY PC 85 TESTED

The uninhibited years of early childhood are the best time to learn a language (and pretty much anything else). But which language should your child learn?

KidSpeak is a fun sampler that introduces kids six and up to 10 languages: Spanish, French, Italian, German, Japanese, Indonesian, Korean, Hebrew, Chinese, and Portuguese. It contains 10 programs that use animated exercises,

games, and songs to teach your child pronunciation, the alphabet, word recognition, simple sentence structure, numbers, and telling time in each of the languages. It teaches about 700 words and expression per language, and there are three levels of difficulty for most activities.

The programs, hosted by a child and a pet associated with the target language, use the immersion approach to learning — speaking and writing only in the language being taught (although some navigational help in English is just a click away). As kids play memory games, connect the dots, and other activities, KidSpeak pronounces the numbers, letters, words, and phrases associated with them. A blackboard area serves as a convenient reference to the elements being learned.

The animations, while simple, are generally colorful and charming and are sure to appeal to kids. (On a few occasions, such as when a child angrily whacks her pet on the head, the animators show questionable judgment.)

While the immersion method is generally accepted as the best way to learn a language, the songs, at least, need translating, as there is little likelihood that you or your child will be able to figure out from the resources provided what is being sung. Also, the Asian languages (and Hebrew) are so foreign to Western ears that more help would have been welcome.

Despite these drawbacks, KidSpeak offers kids a great opportunity to hear how diverse the world's languages are and to learn some of their basic elements.

—Philip Bishop

Transparent Language, *800-752-1767, www.transparent.com; Mac and Windows CD, $49.95; ages 6 and up.*

Sky's the Limit KidSpeak teaches the basics of 10 languages to kids ages six and up.

Super Tutor Spelling

Not the Write Choice

Bottom Line: Disappointing graphics and noncompelling activities spell disaster for this not-so-super tutor.

There's one word you'll need to be able to spell if you buy Super Tutor Spelling: *mediocre.* Its activities, designed for grades seven to 12, are generally uninspired, and its graphics are antiquated.

Haunted Spell Super Tutor Spelling is so dull and its graphics are so plain that it's scary.

Super Tutor Spelling consists of 100 word lists that are presented to your child through six activities in each of seven locations. But although these seven locations have different names — like Sports Arena, Retro Depot, and Music Store — the six activities are the same no matter where your child chooses to go.

This lack of variety might be forgivable if the program's activities were super, but in fact they're juvenile and disappointing, so playing them is tedious.

In one activity, called Cast a Spell, your child must drag the letters of a scrambled word into the correct order. While this activity has educational merit, the graphics — a black cat and other "spooky" stuff — would have a hard time keeping the attention of a seven-year-old let alone a seventh-grader.

All in all, Super Tutor Spelling is not a super tutor at all. *—Philip Bishop*

Super Tutor, *408-523-4788, www.supertutor.com; Windows 95 CD, $29.99; ages 12 to 18.*

3D Castle Creator

One from the Dark Ages

Bottom Line: This simple creativity program lets kids construct on-screen castles. It has mediocre graphics and limited replay value.

Using over 60 3-D pieces based on real medieval architecture, including towers, moats, and gardens, kids build their own castle and learn about castle life and times (with prebuilt and half-built starter castles, construction is pretty straightforward). Kids then decorate their castle with on-screen Crayola colors and patterns and can view and print it in various perspectives. They can also print castle-themed stationery.

Your child can move around the 3-D castles and view period characters, including a king, a page, and a minstrel. The Castle Handbook dispenses historical information about castles and castle life.

It all sounds very rosy, but our 42 testers said that 3D Castle Creator's core features — the graphics, interactivity, and 3-D movement — match up very poorly with modern-day education or entertainment software kids know and love.

Moat Maker Create castles, view their insides, and learn about the Middle Ages.

Kids Said: "It gets boring after a while. There is nothing new to do." *—Daniel Eisenberg, eight, Columbia, Maryland*

Parents Said: "The castle-building tools are decent, but the graphics are too crude,

and there is not enough interaction to make the game worth buying." —*Brian Monsell, Takoma Park, Maryland*

IBM, *800-426-7235, www.ibm.com/pc/us/software; Windows 95 CD, $19.95; ages 7 to 12.*

Family Library

Walt Disney: An Intimate History of the Man and His Magic

The Man Behind the Mouse

Bottom Line: Recommended. This well-made, intimate multimedia biography of Walt Disney includes movies, photos, and drawings never before made public.

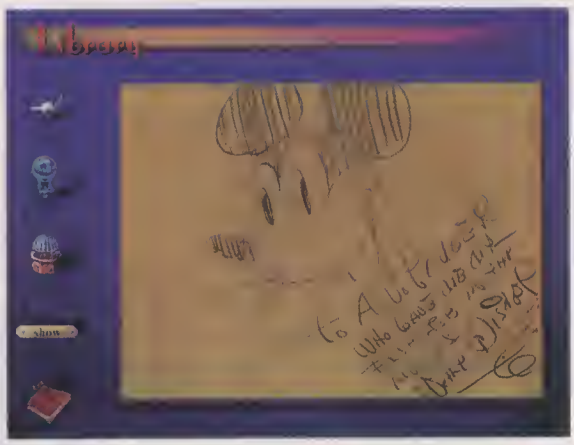
FAMILY PC 88 TESTED

TRUE FANS OF Walt Disney can never get enough. His life as a businessman, filmmaker, and creator is a subject well covered in books. But his newest bio, made with help from his daughter, Diane Disney Miller, would no doubt have pleased even Walt, who always insisted on using state-of-the-art technology to tell a tale.

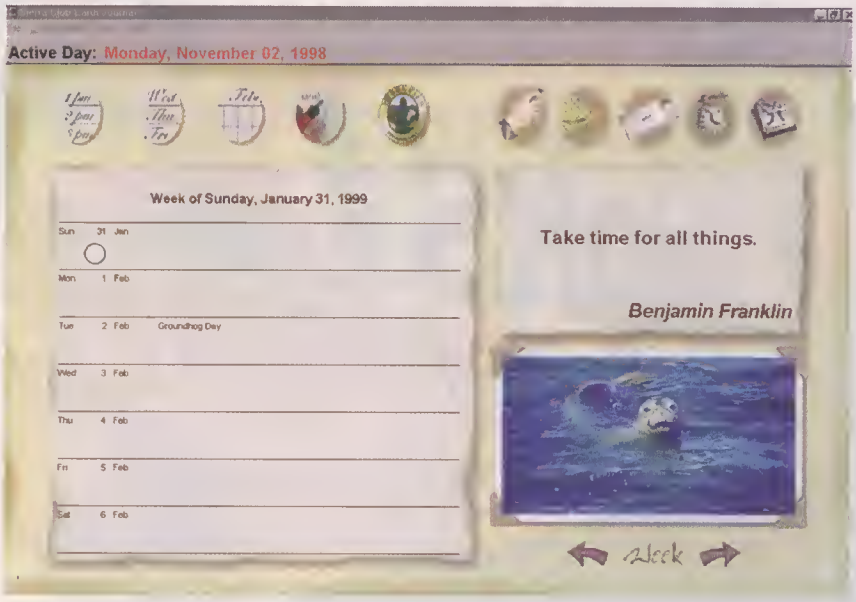
Walt Disney: An Intimate History of the Man and His Magic covers Disney's vast career, from movies to television to theme parks, with home movies, photos, audio recordings, and more. You start the exploration in the Main Hall, an "imaginarium" of 3-D virtual spaces. From here you can browse home movies, rare material from the Disney Archives (such as Walt's early drawings), letters, and essays about Disney by leading film critics and historians. The disc also includes multimedia presentations on Disney's life and work and a sample of his recorded recollections. There are photos, plus audio and video segments featuring his parents, wife, children, grandchildren, and the artists who helped bring his creative vision to life.

Even casual Disney fans will find it interesting to take a virtual tour of Epcot Center as Disney originally envisioned it. The tour includes line drawings of the original city and transportation systems.

In the Theater you can watch the mak-



Man and Mouse Walt Disney's CD-ROM biography contains previously unrevealed Disney treasures.



Perpetually Plain There's nothing special about the Sierra Club's electronic calendar.

ing of Disney's most popular movies and characters. The disc also includes interactive activities, where you try your hand at designing a background, adding a musical score, or making your own animation.

An extensive library and hyperlink and bookmark features make this program a complete and accessible picture of a very public icon, while showing the private side of the family man behind the mouse.

—Amy Mehaffey

Pantheon Productions, *800-900-9234, www.disneyinteractive.com; Windows 95, $39.99.*

Earth Journal: Sierra Club Perpetual Calendar Software

Nothing Lasts Forever

Bottom Line: This capable calendar and personal organizer has plenty of information about the Sierra Club but far too few photos.

THE NEW YEAR is upon us, which means it's time to run out and buy a new calendar. Unless you own a perpetual calendar, that is. Earth Journal: The Sierra Club Perpetual Calendar Software is an organizer that will last forever. No millennium bug here.

Earth Journal is an electronic datebook and calendar that can present any date up through 9999, and you can access each date by hour, week, and month, with events and alarms programmed in. It also includes an address book, to-do list, and scheduling program, as well as a diary. Sierra Club fans will enjoy the complete Sierra Club history, as well as information about outings and local chapters. It features a primer of eco-issues and a list of environmental Web sites.

The pages of the calendar are illustrated with beautiful full-color scenes of mountains, beaches, and wildlife, but unfortunately there are too few photos. "In wilderness is the preservation of the world," wrote Henry David Thoreau. If only Earth Journal preserved more wilderness, however virtual it may be. There are only 52 photos and quotes in the program, one for each week of any given year. Instead of fronting every page, the art is shown only beside the weekly calendar and is hidden during most tasks. You can display photos on a full screen and print them, but they are bound to get old well before the year 9999. Despite the price advantage of a perpetual calendar, the program can't match the print versions.

—Bruce Watson

Sierra Club, *800-935-1056, www.sierraclub.com; Windows CD, $29.95.*

Statement of Ownership

Statement Required by 39 U.S.C. 3685 showing the Ownership, Management and Circulation of FamilyPC, published 12 times annually (monthly except for bimonthly issues in July/August and a special Shopping Secrets issue in November) for October 1, 1998. Publication No. 1076-7754. Annual subscription price is $14.95.

1. Complete Mailing Address of Known Office of Publication is One Park Avenue, New York, New York 10016.

2. Complete Mailing Address of the Headquarters or General Business Offices of the Publisher is One Park Avenue, New York, New York 10016.

3. The Full Names and Complete Mailing Addresses of Publisher, Editor and Managing Editor are: Publisher, Robin Raskin, One Park Avenue, New York, New York 10016. Editor, Joe Panepinto, 244 Main Street, Northampton, Massachusetts 01060. Managing Editor, Judy Fogg, 244 Main Street, Northampton, Massachusetts 01060.

4. The owner is ZD Inc., One Park Avenue, New York, NY 10016 and Ziff-Davis Inc., One Park Avenue, New York, NY 10016.

5. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities: None.

6. Extent and Nature of Circulation.
(Average number of copies each issue during preceding 12 months/Actual number of copies of single issue published nearest to filing date):

A. Total No. Copies	492,204	437,400
B. Paid and/or Requested Circulation		
1. Sales through dealers and carriers, street vendors and counter sales	30,237	10,300
2. Mail subscription	358,853	392,527
C. Total Paid and/or Requested Circulation	389,090	402,827
D. Free Distribution by Mail, Carrier or Other Means, Sample, Complimentary, and Other Free Copies	24,342	11,273
E. Total Distribution	413,432	414,100
F. Copies Not Distributed		
1. Office use, leftover, unaccounted, spoiled after printing	6,391	4,400
2. Return from News Agents	72,381	18,900
G. Total	492,204	437,400
H. Percent Paid and/or Requested Circulation	94.11%	97.28%

7. I certify that the statements made by me above are correct and complete.

(Signed) Charles Mast, Vice President, Circulation, 10/1/98

Links LX EXTREME

Destroy golf etiquete at the Demolition Driving Range

Featuring Atomic Fireballs

Play "extreme" golf on the haunted Mojo Bay Course

Loaded with cheats & pranks

Experience Deathmatch Golf on the Dimension X battlefield

Golf With Attitude!

ACCESS
SOFTWARE INCORPORATED

www.AccessSoftware.com

Save Your Sanity

Cool games to brighten up the long, dark days of winter

Whether you're looking for a little bone-jarring on-ice action, California dreamin' about revved-up racing along the highway, or planning a placid evening with a CD-ROM board game or a round of cards, GameTime's got you covered this month.

NHL 99

The Puck Stops Here

Bottom Line: Recommended. Faster-paced action and better graphics make this the best hockey game going. *Difficulty:* Prepare to practice.

FAMILYPC 90 TESTED

THE NEW FEATURES in NHL 99 — including automated shot deflections and smarter teammates and opponents — make this hockey game a power play you won't want to miss.

NHL 99 offers exhibition or season play (26 or 82 games), playoffs, and penalty-shot modes. A new feature, Coaching Drills, allows you to practice skills before you hit the ice. The game includes all 27 NHL teams and 18 international teams.

Everyone knows the anguish of a tied 0-to-0 hockey game late in the third. This year, EA increased the game's pace, so you can count on higher scores and shot totals. NHL 99 is packed with new features like automated shot deflections, which contribute heavily to high scores, and a shot meter that lets you gauge how powerful your shots will be. Also, you can command your goalie to cover the puck (and force a face-off). You get more coaching strategies than in last year's version, and your computer-controlled teammates are smarter and less likely to go offside.

NHL 99's graphics are sure to make the MVP list, as the players and rinks are highly detailed and the player animations are incredibly lifelike. Subtle touches, such as the way players follow through on slap shots and writhe in pain after an injury, help make the graphics in NHL 99 outshine those of other PC hockey games.

NHL 99 supports 3-D acceleration and looks great on a PC with a 3Dfx Voodoo 2 card installed. The game also supports Direct3D and ATI 3D Rage Pro acceleration, and it even looks pretty good in software-rendered mode.

Multiplayer options include support for up to 12 players over modem, LAN, and Internet links. Head-to-head Internet play is only available through a cheat code, found in the game's readme file; it's not supported by EA and can be quite slow.

Overall, NHL 99 is one of the most impressive sports games we've seen. Even if you're not a hockey fan, check it out.

—Michael E. Ryan

NHL 99, *Electronic Arts, 800-245-4525, www.easports.com; Windows 95 CD, $40 street; all ages.*

Slap Happy If you play 10-minute periods and make fewer than 50 shots on goal per game, you're simply not shooting enough.

Decisive Deflections Thanks to NHL 99's automated deflections, you can often score by shooting to another player from the top of the face-off circle.

Ice Cam If you're having trouble with NHL 99, try the Ice camera angle. It doesn't move very much, and it offers an excellent field of view.

PHOTOGRAPH: JON FEINGERSH/STOCK MARKET

Someone's gonna pay for this!

"With its arcade-action, nostalgic premise and challenging missions, Army Men is a whole lotta plastic fun."- PC Gamer

"Army Men lets you do things that we could only dream of as kids."- CGW

BEST SELLER

ARMY MEN™

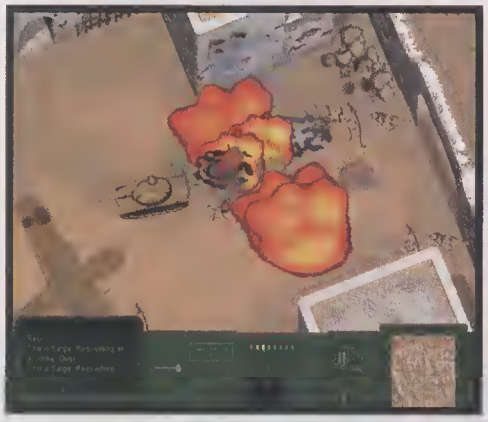
Real Combat. Plastic Men.

Take control as the Green Sergeant in the field, leading your squad of plastic soldiers through 28 combat missions.

It's plastic warfare's finest hour! Melt enemy soldiers with your flamethrower or shatter them with your bazooka.

PC CD-ROM

© 1998 The 3DO Company. All rights reserved. Army Men, 3DO, and their respective logos, are trademarks of The 3DO Company in the U.S. and/or



Attack from the skies with air strikes and parachute drops, or from the ground with tanks, jeeps and halftracks.

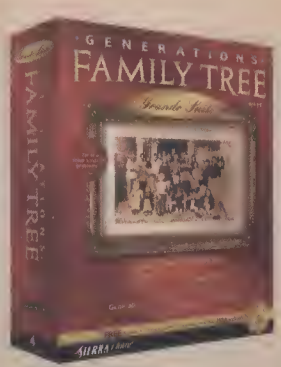
Experience fun and challenging four player Multiplayer competition using free* Internet gaming services.

www.armymen.com

3DO™

other countries. All other trademarks and trade names belong to their respective owners. *Free play on the Internet at HEAT.net or Mplayer.com requires Internet access. Player is solely responsible for all applicable Internet-related fees and charges.

THERE'S THE HARD WAY TO TRACE YOUR FAMILY TREE. AND THERE'S THE EASY WAY.



Generations® Grande Suite will help you find relatives the world over. 12 CDs with over 200,000,000 names. Create an heirloom-quality family tree. Even preserve old family photos and recipes. 1(800)757-7707 or www.slerrahome.com.

SIERRA Home

WE'VE GOT YOUR HOME COVERED.™

©1998 Sierra On-Line, Inc. ® and/or™ designate trademarks of, or licensed to Sierra On-Line, Inc. Bellevue, WA 98007. All Rights Reserved.

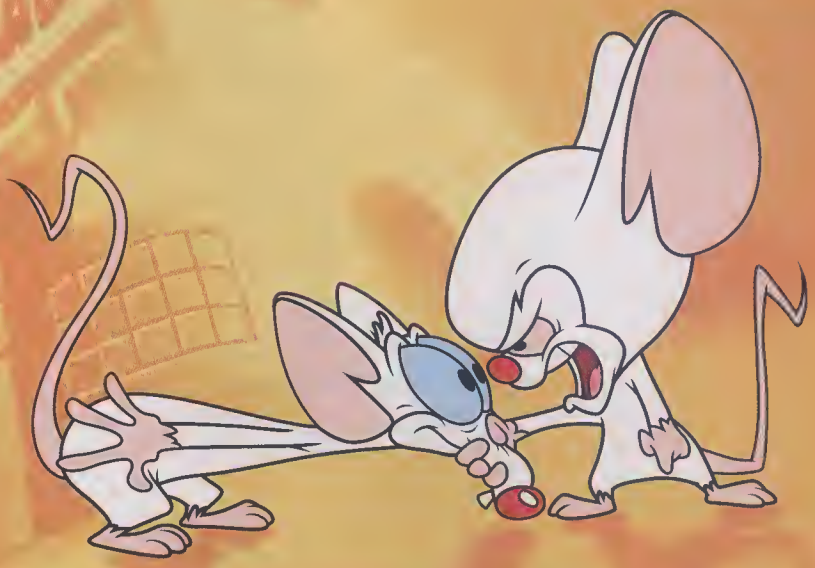
featuring

PINKY and THE BRAIN™

- Fast-paced, 3D arcade game featuring the off-the-wall humor of Pinky & the Brain
- One to Eight Players
- Tournament Play available
- LAN and Internet Multiplayer options
- 20 pre-designed mazes and countless others available through random maze generation
- Build your own mazes with the included maze generator
- 3 types play: percentage of territory, timed play, tag/keep-away
- Spectacular lights and sounds
- Compatible with Gravis-type Joypad, or Keyboard/Mouse

www.southpeak.com

SOUTHPEAK™ INTERACTIVE



You see Pinky, the plan is to develop a secret hypnotic message that will make humans think I am their almighty ruler, and embed it in an action-packed video game. Naturally we will be the stars. People will play the game by themselves and become horribly addicted. Then they will want to play the game with their friends, and their friends will become addicted. Soon, they will play the game over the Internet, a silly little information infrastructure that humans use to "chat" with each other. Anyway, once we control the Internet, every human being will bow down before me, their rightful master. And by the turn of the new millenium, the world will be ours!

World Conquest

multi-player maze game

New Games

Dr. Brain Thinking Games: Puzzle Madness

Use your wits to capture Dr. Brain's evil clone by solving seven types of puzzles – each with dozens of scenarios and three skill levels – before he destroys the city. In Blimp Aeronaut, for example, you pilot a blimp through the currents in the airways of the upper city. In Factory Fracas, you dodge robots and rearrange conduits in a factory to get the machinery functioning again.

Knowledge Adventure, *800-542-4240, www.adventure.com; Mac and Windows CD, $30; ages 9 and up.*

Powerslide

Powerslide is full of off-road stunts, including jumps, barrel rolls, drop-offs, corkscrews, and loops. Eight

tracks traverse ledges, gorges, tundras, and abandoned urban city-scapes. Up to eight can play in multiplayer mode, and the game supports force-feedback peripherals. So get a grip and go.

GT Interactive, *800-898-1438, www.gtinteractive.com; Windows CD, $54.95; ages 8 and up.*

Dark Side of the Moon

This sci-fi mystery takes place in a mining colony on a distant moon. You play Jake Wright, who becomes entangled in a murder investigation and is pursued as a fugitive. In this interactive-movie game, you get full-motion video and interact with live actors. Along the way, you solve puzzles, dodge sinister characters, and work with others that can help you.

SouthPeak Interactive, *800-774-6183, www.southpeak.com; Windows CD, $49.95; ages 13 and up.*

Need For Speed III: Hot Pursuit

Hunka Hunka Burning Rubber

Bottom Line: Recommended. Need For Speed III includes fast driving and frequent accidents, but the only things that can get damaged are your car and your ego. *Difficulty:* Prepare to practice.

FAMILY PC 90 TESTED

In their time, Need For Speed and Need For Speed II were supercharged driving games. But they are yesterday's Yugos compared to the game's latest version: Hot Pursuit. With its enhanced 3-D sound and graphics, and improved cars and tracks (you can now drive as cops and at night), this version leaves all other driving games in the dust.

For starters, NFS III features a superb opening sequence of sports cars in action, complete with revved-up music that gets you in the mood to put the pedal to the metal. Everything about this game is slick. You can play it in a variety of modes, including Single Player, Multiplayer (on the same computer, via a modem, or over a network), Hot Pursuit (in multiplayer, you choose who plays the cops), Knockout (a single-elimination tourney), and Tournament (eight four-lap races).

You can race one of 13 licensed cars — or download more from EA's Web site — and nine tracks. Not sure how the Jaguar XJR-15 compares with the Lamborghini Diablo SV? Go to Car Compare for a graphical breakdown. And the game has a whole new level of customization: You can dictate your car's color and transmission and adjust its brakes, suspension, tires, and gear ratios. You can further customize Hot Pursuit's cameras, controls, audio, and display.

But where the new NFS really shines is on the track. Whether you're a beginner or a seasoned racer, playing the game is an exhilarating experience. Just driving a Corvette at 130 mph is a thrill — but turn it into a police car with siren and tire-popping spikes, and you've got a game that'll drive race fans wild. —*Sam Mead*

Electronic Arts, *800-245-4525, www.ea.com; Windows 95 CD, $49.95; ages 8 and up.*

Pull Over In Need For Speed III, you can try to avoid getting tickets or hand them out yourself.

All New Hoyle Card Games and All New Hoyle Board Games

Collection of Family Classics

Bottom Line: Recommended. Sierra's new card and board game compilations offer entertaining, challenging, and kid-safe fun. *Difficulty:* Anyone can play.

FAMILY PC 88 TESTED

If you're trying to steer your little ones away from game violence, Sierra has a solution. The new versions of the Hoyle classic card and board games are value-priced collections with a number of additional games, more robust multiplayer support, new artwork, and game-play improvements.

Hoyle Board Games has been revamped, adding four new games to the original 10 — chess, backgammon, checkers, Yacht, dominoes, Snakes and Ladders, Chinese Checkers, Parchisi, Battling Ships, and Zen Bones (a variation of the Shanghai tile game). New are Reversi, Mancala, a vertical four-in-a-row game dubbed Line 'Em Up, and Placer Racer, an addictive clone of Taito's recent arcade hit, Bust a Move 2. You can play most of these games against a friend or via Sierra's free multiplayer network, Won.Net (www.won.net).

The new Hoyle Card Games (family testers gave the original version a score of 87) is an updated collection of 14 card games. Go Fish, euchre, memory match, and variations of pinochle join the lineup of spades, hearts, war, old maid, crazy eights, gin rummy, bridge, and cribbage. If you're new to any of these classics or need to brush up on the rules, Sierra in-

INSTANT GRATIFICATION!

Kick the tires, light the fires and go! You're Maverick, defending your country and your honor in TOP GUN: HORNET'S NEST, the action-packed, pulse-pounding air-combat game. Dogfight, bomb and maneuver your way through 3D blistering, white-knuckle missions in extreme 3-D environments. Don't waste time learning commands – waste enemies! You're Maverick. Go get 'em, hotshot!

TOP GUN®

HORNET'S NEST™

Available on Windows 95/98 CD-ROM.
Visit your local retailer or call 1-800-695-GAME, day or night, U.S. or Canada.

TEEN T ESRB

ZIPPER INTERACTIVE

HASBRO Interactive

MICROPROSE

www.microprose.com

TOP GUN ® & © 1998 Paramount Pictures. All Rights Reserved. Used under license. Game design and underlying computer code © 1998 Hasbro Interactive and MicroProse, Inc. All Rights Reserved. MICROPROSE is a U.S. registered trademark and HASBRO INTERACTIVE, the HASBRO INTERACTIVE logo, and HORNET'S NEST are trademarks of Hasbro or its affiliates. MicroProse is a subsidiary of Hasbro. All other trademarks are the property of their respective holders.

Learn to cut, paste, download, and most important, save.

Jennifer in Jersey City

"Now that I've mastered **Microsoft Office**, my proposals always have a professional look. And I never had to leave work to learn."

Dave in Duluth

"ZD University offers practical training in the hot topics that interest me—**online investing** and **online advertising**."

Maddie in Melbourne

"It's amazing what effective **Internet searching** can do to supplement a traditional research project."

www.zdu.com

More than 100 online classes—all for just $7.95 per month.

If keeping up with today's hot computing technology is part of your job—or part of your life—ZD University is simply the most affordable, most convenient way to do it.

To try ZD University for FREE, visit us on the Web at www.zdu.com today.

ZD UNIVERSITY

Online Learning for a Connected World

©1998 ZD Inc. All rights reserved. ZD University and the ZD University logo are trademarks of ZD Inc.
All other product names and services are trademarks or registered trademarks of their respective owners.

play games?

buy them at

GAME DEALER .COM
THE INTERNET'S GAME SUPERSTORE

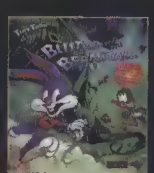
i play games
T-Shirt with every order over $50.**

SEX AND VIOLENCE
It's in a lot of games these days. Game Dealer provides ratings that let you decide what games are appropriate for your child.

1-800-610-2614
VIP CODE: FPC3
WWW.GAMEDEALER.COM
Lots of Information
Prompt Delivery
$4.00 Shipping*

GREAT PRICES ON THESE TITLES & MORE

AXIS & ALLIES


BUSTER AND THE BEANSTALK

A BUG'S LIFE

BARBIE NAIL DESIGNER

WINDOWS
MACINTOSH
PLAYSTATION
NINTENDO
SEGA

Fax 1-212-387-8021 International 1-212-358-9100 251 Park Ave South New York, NY 10010

*$4.00 rate US Priority Mail, US orders only. Additional shipping methods are available.
** All orders placed before January 30, 1999.

© 1998 ActionWorld, Inc. All rights reserved. The GameDealer.com logo, The Internet's Game Superstore and I Play Games are trademarks or registered trademarks of ActionWorld, Inc. in the US and other countries. All other trademarks belong to their respective owners.

MEMBER SITE UGO.COM MEMBER

Dark Side of the Moon, SouthPeak and the SouthPeak logo are trademarks of SouthPeak Interactive LLC. Video Reality and the Video Reality logo are trademarks or registered trademarks of SAS Institute Inc., used under license. Other brand or product names are trademarks or registered trademarks of their respective companies.

ON THE DARK SIDE OF THE MOON™
GREED IS THE ONLY DEADLY SIN.

SOME PEOPLE WILL DO ANYTHING TO FIND THE RICHES BURIED DEEP INSIDE THE ALIEN MINING COLONY.
OTHERS WILL DO WHATEVER IT TAKES TO KEEP THEM HIDDEN.

dark
Side of the Moon™

Dark Side Of The Moon is a deep-space sci-fi adventure that will immerse you in 360° of completely seamless, incredibly realistic, motion picture-quality gaming.

RATING PENDING
RP
CONTENT RATED BY ESRB

VIDEO REALITY®

WIN 95|98
CD-ROM

Q&A: SimCity 3000

Fans of the immensely popular SimCity games are clamoring for the latest title, which is set for release in February after two years of delays. Here's the lowdown straight from **Lucy Bradshaw,** the executive producer of SimCity 3000.

What are some of the new features?

In SimCity 3000, we've given the player much more control over their cities and many additional city design options. For example, there are major differences in residential zoning, in terms of how it impacts the city and how it looks on the screen. In addition, players get a lot more feedback from the main game screen and its graphical elements.

How do SimCity 3000 cities look?

We've added animated traffic and pedestrians, which are tied into the game's artificial intelligence. When you build a school, school buses become part of the traffic. Doctors, nurses, and patients walk around hospitals. At any time, you can click on any pedestrian or vehicle to obtain information that pertains to managing your city.

There are now many more landmarks that people can place in their cities. Built into the game are landmarks like the Hollywood sign, the Eiffel Tower, the Empire State Building, and the Statue of Liberty. Using the built-in building architect tool, people can create their own types of buildings. We've also created a Web site [www.simcity.com] where people can download new buildings, scenarios, and game information.

–Jason R. Rich

cludes comprehensive tutorials for each game. As with the new Hoyle Board Games, players can log on to Won.Net and play against others over the Internet for free. If multiplayer gaming isn't your bag, challenge a handful of artificial opponents (each with its own look, voice, and skill level) or indulge in more than 30 versions of solitaire, including Freecell, Klondike, and Golf. *—Marc Saltzman*

Line 'Em Up Five-minute diversion or lunch-hour waster – the choice is yours.

***Sierra,** 800-757-7707, www.sierra.com and www.won.net; Windows 95/98 CDs, $29.95 each; ages 8 and up.*

Game of Life

A New Way of Life

Bottom Line: Recommended. Another successful family classic goes digital. Wholesome fun. *Difficulty:* Anyone can play.

LIFE'S STILL A game — this time, a CD-ROM game with 3-D animations, music, and fun games that help you earn cash as you drive over a hilly 3-D board.

The CD-ROM features two versions of Life — Classic and Enhanced — for one to six players. Classic is like the original board game: You spin, move, choose a career, get married, and have kids before you retire.

In the Enhanced version, instead of collecting Life cards, each time you land on a Life square you get to play one of Life's Little Games — Crane Dump, Skunk Money, Safe Cracker, and others — to earn extra cash. In Skunk Money, for example, players get six chances to rack up a little dough by clicking on squares that hide cash prizes. Click on a square that uncovers a skunk, and all your money is lost.

In both versions, you select a car and choose an animated character to drive through Life's 3-D landscape (you get to choose an overview mode to see the whole board, or use the Travel Animations option to have a driver's-eye view of the road).

Hasbro has done a great job of re-creating this classic board game as an enjoyable PC adventure. *—Lauren Simonds*

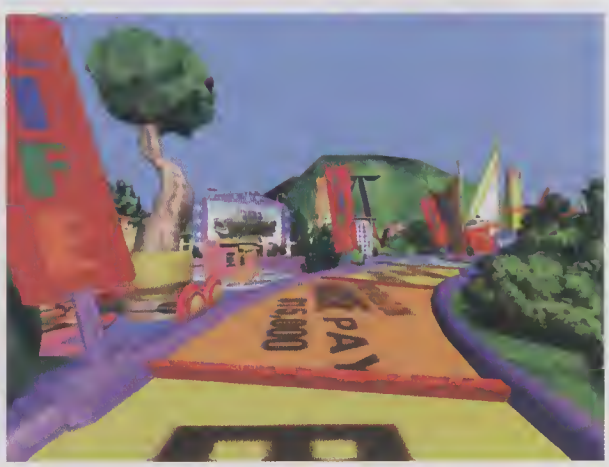
***Hasbro Interactive,** 800-400-1352, www.hasbrointeractive.com; Windows 95, $29.95; ages 8 and up.*

Icarus: Sanctuary of the Gods

Spellbinding Strategy

Bottom Line: Recommended. This 3-D role-playing game has muted violence – if you knock an opponent upside the head, numbers, not blood, fly out. *Difficulty:* Prepare to practice.

ICARUS, SET IN a world on the edge of apocalypse, full of demons, druids, spells, and, of course, good old-fashioned sword-fight-



Life Cycles Get married, have kids, gamble a bit, retire rich.

Welcome To Blackstone Asylum

Will You Be Dressing For Dinner?

Fasten your straight-jacket. It's time to immerse yourself in the chilling world of John Saul's Blackstone Chronicles™: An Adventure in Terror – the first collaborative effort between NY Times best-selling author John Saul and Legend Entertainment. Stunning 24-bit artwork surrounds you in the evil that is Blackstone Asylum – where tortured spirits from the past offer you the only hope of saving your missing family. And your sanity. Bon appetit.

LEGEND

John Saul's Blackstone Chronicles

www.Blackstone-Chronicles.com

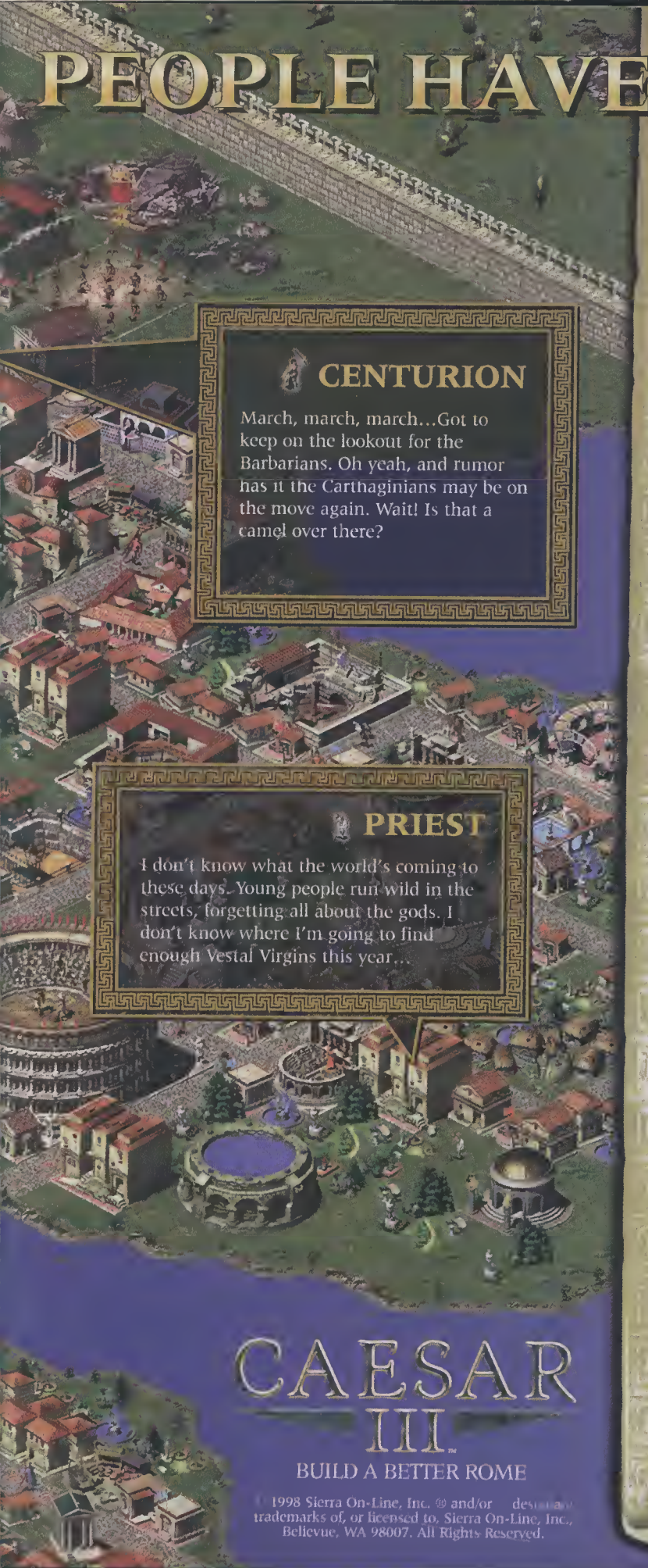
John Saul's Blackstone Chronicles: An Adventure in Terror ©1998 Mindscape, Inc. All rights reserved. John Saul's name and likeness are the property of John Saul. The original novel "The Blackstone Chronicles" ©1997 John Saul. Used under license by Mindscape, Inc. in conjunction with Legend Entertainment. Windows is a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. All other trademarks and copyrights are the property of their respective holders.

ACTUAL GAME SCREENS

RATING PENDING
RP
CONTENT RATED BY ESRB

HAIL CAESAR, YOUR

PEOPLE HAVE SPOKEN!



"I find myself continually drawn back to the game to try just one more tactic... To paraphrase Shakespeare's Antony, 'I come to praise Caesar III'."

– JOHNNY WILSON
EDITOR-IN-CHIEF, COMPUTER GAMING WORLD

"A must buy for any hard core strategy fan . . ."
–IGN PC

9 OUT OF 10!
"You will find Caesar III a refreshing change from the usual shoot-em-up fare of this season. In short, 'Hail Caesar!'."
– ONLINE GAMING REVIEW

". . . the Caesar series is a classic that's only getting better with age."
– GAMECENTER

CAESAR III™

BUILD A BETTER ROME

© 1998 Sierra On-Line, Inc. ® and/or ™ designate trademarks of, or licensed to, Sierra On-Line, Inc., Bellevue, WA 98007. All Rights Reserved.

IN STORES NOW!

Download the demo At
www.sierrastudios.com
or www.caesar3.com

SIERRA STUDIOS

Impressions

EVERYONE E CONTENT RATED BY ESRB

Activision is a registered trademark of Activision, Inc. © 1998 Activision, Inc. Asteroids is a trademark and © of Atari Interactive, Inc., a Hasbro affiliate. All rights reserved. All other trademarks and trade names are the properties of their respective owners.

SYROX DEVELOPMENTS

ACTIVISION®
www.activision.com

ASTEROIDS™
Back. And bigger than ever.

ing, is a role-playing game with an admirable goal: Make it easy enough for the casual gamer.

You start the game witnessing the destruction of a village by an evil wizard. Dreus, the young hero and one of several characters you can control, vows revenge. You help him and seven other characters explore and fight through some pretty creepy combat.

Playing Icarus is simple: You use the mouse to direct your character, and once you enter battle and pick the sinister enemy you want to attack, the game does the rest. That's not to say you don't need to strategize — whenever you can, you need to look for spells and talk to villagers to get information.

On the downside, the game lacks some features that role-playing gamers have come to expect. For example, you can only save a game while walking around and chatting people up — not during battle — which is unfortunate, because battles take quite a few moves to complete. If you have to leave a game while you're in the middle of the battle, you'll have to start that battle right from the beginning when you come back. Another mark against the game is the lack of an online opponent. To me, the whole purpose of role-playing is to interact with (or at least throw a lightning bolt at) your best friend.

Still, Icarus is fun to play and, at $34.95, a small price to pay for practicing a little magic, slaying evil wizards, and saving the world from evil.

—Sam Mead

***JC Research,** 408-977-0250, www.gameclub.com; Windows 95 CD, $34.95; ages 10 and up.*

Lightning Strikes Sometimes you need more than a bow and arrow to save the day.

Gone Gamin'

Immerse yourself in the world of new 3-D sound

By Kurt Carlson

Once you've heard a game that takes advantage of new 3-D environmental sound technologies, your old games will sound like AM radio through a cheap set of speakers.

Of course, in gaming, sound is key (try playing NASCAR Racing or Jedi Knight with the sound turned off). And 3-D environmental sound not only changes the way a game sounds, it can also change the way you play it. For example, in Jedi Knight you can hear the light saber buzz of a bad guy behind you (over your right shoulder, even) early enough to turn and fight. Then, as your fight moves from a large open area to a small rock cave, the echoes and reverb of your clashing sabers change.

For the best 3-D audio results, you need a $100 sound card that supports Creative Labs' Environmental Audio or Aureal Semiconductor's A3D; a set of four speakers with a subwoofer (though A3D will work OK with two speakers); and a game programmed to take advantage of the technology. I recently installed Creative Labs' Sound Blaster Live card and tried a bunch of early environmental sound games, and the results sound great.

• **Myth II: Soulblighter** (Bungie, www.bungie.com). Chirping birds and creaking windmills add a pastoral effect to a brutal world of poisonous undead and possessed warriors. Environmental sound really comes into play when mortars whiz overhead or swords clash within castle walls.

• **Need For Speed III** (Electronic Arts, www.ea.com). Is that a police siren coming up behind you? If it is, you'll hear it, and you'd better floor it.

• **Thief: The Dark Project** (Looking Glass, www.lglass.com/thief). Sound (or the lack of it) is your most important weapon as a master thief. In this game, you must rely on stealth and smarts to survive – wanton killing and heavy weapons will get you nowhere.

• **Trespasser** (DreamWorks Interactive, www.dreamworksgames.com). If a dinosaur roars in the jungle and no one survives to hear him, does it make a sound? Trespasser holds the answer to this prehistoric riddle. (The answer is yes.)

• **SimCity 3000** (Maxis, www.ea.com). A good mayor listens to citizen complaints. SimCity 3000 uses environmental sound to give you a sweeping audio map of your cityscape.

• **Wheel of Time** (GT Interactive, www.gtinteractive.com). The combination of magical role-playing, first-person action, and real-time strategy put this game on my radar screen. Support for environmental sound makes it a must-have.

If you're eager to catch the next wave in PC gaming, get on the enviro-sound bandwagon. You'll find it a sound investment.

***Kurt Carlson** is* FamilyPC *senior editor for software. E-mail him at kurt_carlson@zd.com.*

ILLUSTRATION DAVID OPIE

CHRISTMAS CANCELED?

December 25, 1998 **North Pole Gazette** Temp. -31

Rudolph Worried!

Reports say Rudolph has started a nationwide hunt for Santa! The elves have reported all efforts to find Santa are being made.

SANTA'S MISSING!

Golden Tee Golf to Blame

Santa was last seen Christmas Eve. "I saw him buying that way cool Golden Tee Golf game!" said Jimmy Barns, 8, of Chicago, IL. Jimmy [illegible] when he woke up to find that the cookies that

Travel
Classi
Horosc
Busi
Movie

Golden Tee -GOLF- ™

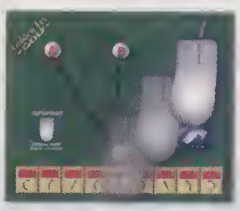
The Perfect Gift Under Your Tree!

Now available at a store near you!

Voted 1998 Most Played Video Game of the Year*

Lightning Fast Arcade Style Game Play

Three 18 Hole Courses in a Variety of Multiplayer Options



TrackSwing™ Technology: Natural Mouse Swing

INCREDIBLE TECHNOLOGIES
www.itsgames.com

Interplay AFFILIATE PARTNERSHIP
www.interplay.com

Incredible Technologies and Golden Tee Golf are trademarks of Incredible Technologies, Inc. Interplay and the Interplay logo are trademarks of Interplay Productions. All Rights Reserved.

*Voted 1998 most played coin-operated game of the year by Amusement Machine Operators Association.

Tools Of The Trade

TravelSmith
Packable Panama Hat
Coolmax® Tee
Convertible Pants
Packable Raincoat
Mini Hair Dryer

Jackson & Perkins
Garden Votives
Resin Pots
Frog Rain Gauge
Seed Birdhouse
Arch Arbor

Frontgate
Custom Wine Cellar
Airtight Bottle Toppers
Screwpull Wine Opener
Motorized Bar Trunk
Stainless Wine Bucket

SelfCare
Dermacolor Mineral Blush
Magnetic Bio-Massager
Nail-Care Kit
Potent-C Serum
Interplak Toothbrush

thousands of catalogs • one site

Catalog City™

© 1998. All rights reserved. Catalog City is a trademark of Catalog City, Inc. All other trademarks are the property of their respective holders.

www.catalogcity.com

Help & Advice

YOUR QUESTIONS ANSWERED

Professor Poor's Question of the Month

Sounds of CD Silence

Dear Professor,
I can't listen to audio CDs through my speakers, though I can hear them if I plug headphones into my CD-ROM drive. The speakers work correctly in every other situation. What's the problem?

Donna Knight
via e-mail

Dear Donna,
Your problem could be a simple software setting. Double-click on the speaker icon on the Windows taskbar. In the Volume Control window, check the CD Audio section; make sure that the volume slider is high enough that you can hear the music and that the mute box isn't checked.

If that doesn't take care of the problem, open your PC and look at the back of your CD-ROM drive. It should have three connections: a flat, gray ribbon cable; a power connection consisting of red, yellow, and black wires; and a bundle of three thin wires — often wrapped in gray sheathing — that connects the drive to the sound card. If this last connection is missing, contact your dealer, system manufacturer, or CD-ROM maker and get the proper wire. If the connection is present, make sure it is secure at both ends.

If you still can't hear any music, take a stereo patch cord (available at stores such as Radio Shack) and plug one end into the headphone jack on the CD-ROM drive and the other end into the auxiliary line-in input connection on the back of your sound card. If you can now hear the audio CD through your computer speakers, the problem is either a bad connecting cable or a failure in your sound card. Buy a new connecting cable and try again. If the problem persists, you'll need to replace your sound card.

Send your questions to Professor Poor, FamilyPC, *244 Main St., Northampton, MA 01060, or to alfred_poor@zd.com. For more Professor Poor tips, go to www.zdhelp.com.*

ILLUSTRATION CHRIS VAN DUSEN

What's Inside

- *Review: Undo-it*
- *Download of the Month: Conversion Buddy*
- *Utility Watch*
- *What's That Do?: The Reset Button*
- *Windows 95/98 Tips*

UTILITY OF THE MONTH

Undo-it

Take back what you've done

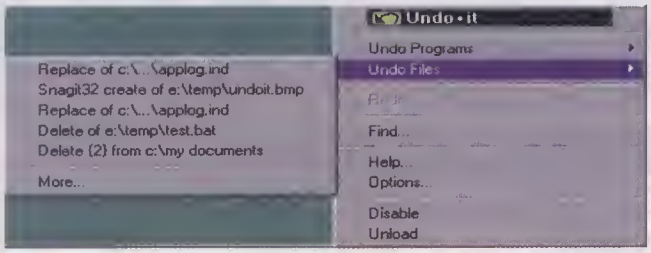
FamilyPC *Recommended*

How would you like to buy a time machine for $40? Well, that's what Kiss Software is offering with its Undo-it utility for Windows 95 and 98. It won't send you back to spend time with Aristotle or Leonardo da Vinci, but Undo-it can help you recover from all kinds of mistakes that you might think are lost causes. If you've ever had the misfortune of deleting your dissertation or losing a work file, you know how invaluable a safety net like Undo-it can be.

Perhaps you just emptied your Recycle Bin, only to discover that it contained a file you needed to keep. Undo-it can bring the file back from the great beyond. Or maybe you accidentally deleted or moved an entire folder. Undo-it can put the files back where they were. The program can even reverse the effects of installing or uninstalling a program. Or how about this common problem: You hit Save instead of Save As while working on a document and accidentally overwrite the original. With Undo-it watching your back, you can easily recover the original document you thought was gone forever.

This may seem like magic, but it is fairly simple. Undo-it tracks your system's operations, and whenever it sees files being

altered or deleted, it saves a copy of them in an Undo Bin on your hard disk. You can specify how much space to allocate to this bin — the default is 20MB. Undo-it drops the oldest changes when the bin reaches capacity. The program uses compression technology so files in the bin take up less space than they would normally require on your hard disk.



Déjà Vu The Undo-it pop-up menu makes it easy to undo mistakes, including deleted files.

Undo-it has its share of rough spots. Some of the Undo-it actions are a bit cryptic. You'll want to read the manual carefully before you install the program. The manual also has a few errors, such as referring to the SETUP program which in fact is named SETUP32, and showing menu items that don't match the wording that the program itself uses. One more caution: Our tests indicate that the utility cannot coexist with other undelete and system monitor programs that try to track file changes on your hard disk. This isn't necessarily Undo-it's fault; still, make sure you remove any other tracking programs before installing Undo-it.

Overall, however, this is an extremely useful program. If it pulls back just one term paper or scanned photo from the Great Bit Bucket in the sky, it will have more than earned a permanent place on your hard drive. —*Alfred Poor*

***Kiss Software,** 888-454-7726, www.kissco.com; Windows CD, $39.95.*

D O W N L O A D O F T H E M O N T H

Conversion Buddy

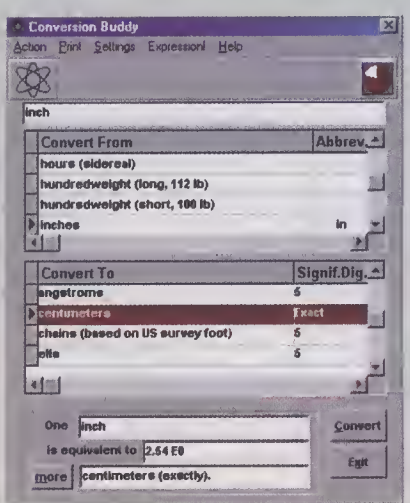
A calculating little utility

FamilyPC *Recommended*

America is the only country in the world that doesn't use the metric system, and like it or not, you're bound to run into it sooner or later. Whether you're fixing a car, cooking a meal, or driving through Europe, you'll need to convert inches to centimeters, ounces to grams, or miles to kilometers. At times like these, you need Conversion Buddy.

The program is quick and easy to use, and in addition to metric it converts dozens of other unit measures (standard atmospheres or yards per hour, for example). First, you pick the original unit of measure and choose from a list of available conversions. Then you open the calculator window and enter the number of whatever it is you want to convert. The calculator displays the results.

Best of all, you won't need to use the program to convert the cost into your local currency, because it's free. You can download a copy from the ZDNet Software Library at www.zdnet.com/swlib/. To get to the download page, type Conversion Buddy v4.1 in the search box. —*Alfred Poor*



What's That In? Conversion Buddy converts measurements using familiar and obscure units.

Utility Watch

Tools to tame your family computer

Total PC Protection

• **Utility Pack.** Quarterdeck's Utility Pack combines three of its popular tools — CleanSweep, Crash Defender Deluxe, and ViruSweep — to help keep your PC in working order. The tools clean your hard disk of unwanted files, protect your PC from a variety of crashes and system freezes, and scan for and remove viruses. The $59.95 package also includes a free one-year subscription to TuneUp.com, an online PC service station. *Quarterdeck, 800-354-3222, store.quarterdeck.com.*

Super-Size Web Searcher

• **BullsEye.** When you search the Internet with this utility from IntelliSeek, it accesses more than 300 search engines, ranks document relevance, and removes duplicate sites, mismatched documents, and dead links. The software can also track data changes on the Web and alert you to the new information. Download the $49 BullsEye at www.intelliseek.com. *IntelliSeek, 513-936-0700.*

Increase Web Speed and Privacy

• **InterMute 1.2.** This $19.95 shareware utility works with your browser to block banner ads, animated images, cookies, background music, and other things that slow your download times. Blocking the data from downloading lets you surf the Web faster and more efficiently. InterMute's customizable interface lets you choose which Web sites and data to filter. It also protects your privacy by making it hard for advertisers to track your Web use. To download a free 14-day trial copy, point your browser to www.interMute.com.

No More Lost Phone Calls

• **HotCall.** If you miss phone calls because you're online, you need this utility from Command Communications. Working with your local phone company's Call Waiting service, HotCall alerts you to calls with an on-screen indicator light and an audible ring without interrupting your online connection. You can answer and talk, which terminates your Internet connection; use a few seconds to decide the call isn't important and return to the Web; or ignore the call and send it to your voice-mail service (available through your local phone company). For more information on HotCall (available in retail outlets for $134.95), call 800-288-6794 or go to www.command-comm.com.

3-D ULTRA

NASCAR® PINBALL

Pull the plunger, put the pedal to the metal and race to the checkered flag. **3D Ultra NASCAR® Pinball** combines the thrill of NASCAR® racing and the fast-flipper action of pinball into wild bumper-to-bumper fun.

- Includes NASCAR® greats Dale Earnhardt, Bill Elliott, Terry Labonte and Bobby Labonte
- 3-D Ultra Pinball Quality, including extra wide tables, no scrolling and dynamic ball physics
- Stunning 3-D graphic animations–including motion-capture pit crews

The Pit

Specialized tables simulate NASCAR® race strategy

The Garage

The Speedway

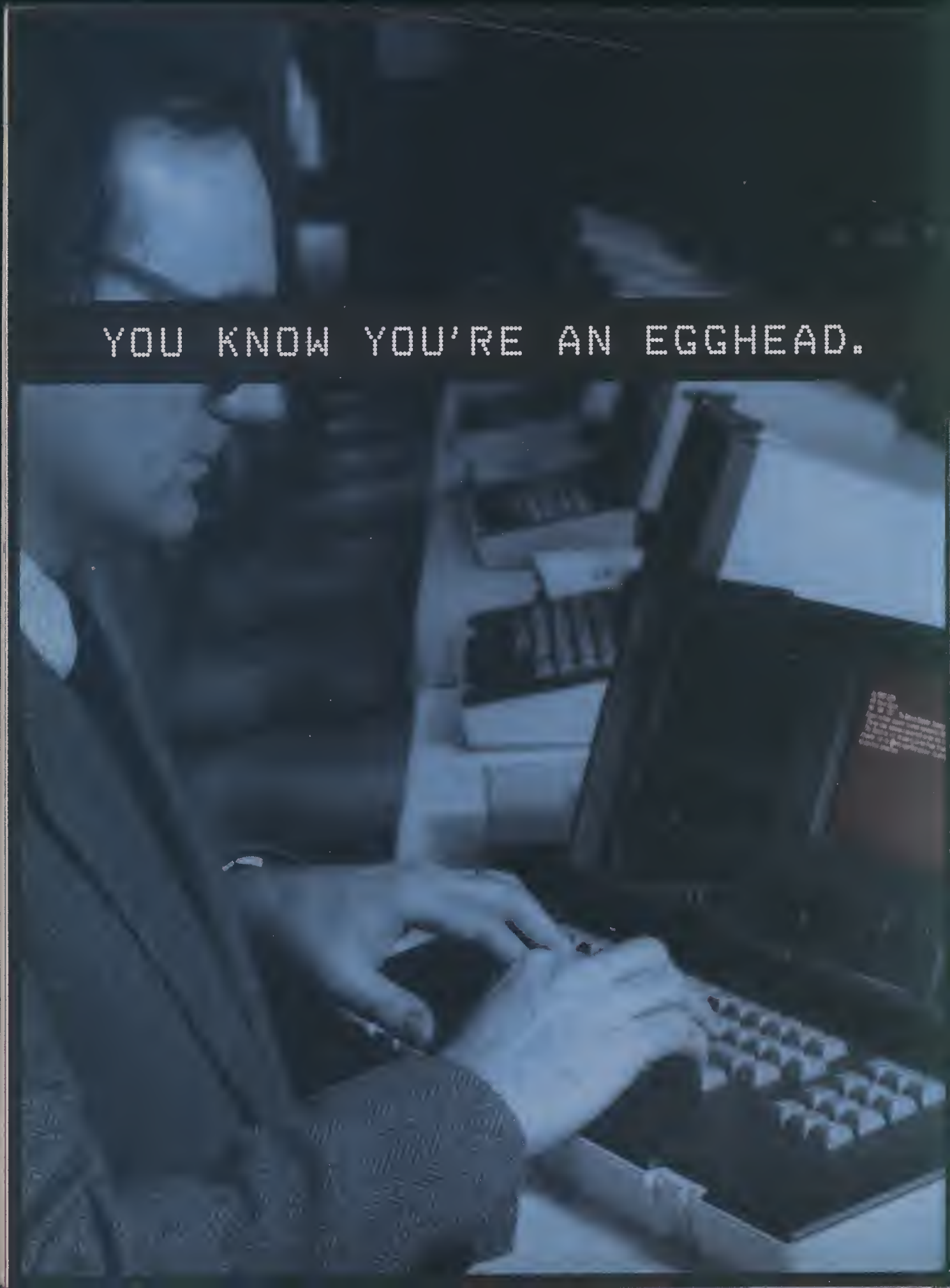
The Fastest Pinball in Racing

SIERRA attractions

Try the Free Demo

www.nascarpinball.com

©1998 Sierra On-Line, Inc. ® and/or ™ designate trademarks of, or licensed to Sierra On-Line, Inc., Bellevue, WA 98007. All rights reserved. NASCAR® Pinball is officially licensed by NASCAR. NASCAR® is a registered trademark of the National Association for Stock Car Auto Racing, Inc. The name and likeness of the #3 GM Goodwrench Service stock car and Dale Earnhardt are licensed with Dale Earnhardt, Inc. Bill Elliott name and likeness licensed by Advantage Management, Inc., Nashville, TN. ©1998 McDonald's Corporation. The following are Registered Trademarks of McDonald's Corporations. McDonald's, McDonald's Logo and Design, McDonald's Racing Team Logo and Design, Golden Arches Design, Speedee Logo and Design, Ronald McDonald House Charities. "Bobby LaBonte," "Joe Gibbs Racing," "#18" and "Interstate Batteries" licensed under authority of Redline Sports Marketing, Inc., Charlotte, NC. License granted by Kellogg Company and Hendrick Motorsports. ™ © 1998 Kellogg Co. Watkins Glen International Raceway and Talladega Superspeedway are registered trademarks, and the marks and track likenesses are used under license from ISC Properties. ATLANTA MOTOR SPEEDWAY® AND BRISTOL MOTOR SPEEDWAY®, INCLUDING NAME, LIKENESS, LOGOS AND EVENT NAMES AND LOGOS, ARE REGISTERED TRADEMARKS OF SPEEDWAY MOTORSPORTS, INC. Officially licensed product of Speedway Motorsports, Inc. ©1998. www.speedwaymotorsports.com


YOU KNOW YOU'RE AN EGGHEAD.

AND YOU'RE NOT ALONE.

There are millions of eggheads. And the new Egghead.com offers you three intelligent ways to shop for the best values on the Web. Our diverse assortments range from computers and office products to sporting goods and jewelry. Choose from among the top brands in America. With so much more than just software, being an egghead is a lot more popular than it used to be.

egghead.com™

SHOP THREE TIMES SMARTER™

Superstores
Over 30,000 products online

Auctions
Action-packed online bidding

SurplusDirect
The online liquidation center

WHAT'S THAT DO?

The Reset Button

Many PCs still have a reset switch on the front of the case — which is unfortunate, because it is a tempting button for curious fingers to poke, and no good can come from using it. Fortunately, some new systems have relegated the reset button to the back panel and have safer suspend/sleep buttons placed conveniently in front.

The reset switch looks like the power switch, but there is an important difference. The reset switch sends a signal to the motherboard to reboot the system without turning off the power. Unlike the Ctrl-Alt-Del reboot command, this method bypasses the CPU. The power switch kills all power to the computer when you turn it off, and the power stays off until you turn the computer back on.

In the early '90s, it could take several minutes for a computer to complete its power-on self-test (POST), so people were justified in using the reset button instead of the power switch to restart after an unrecoverable system crash: The reset button bypassed the POST and saved a lot of time. With today's fast systems, however, you're better off using the power switch when you get a crash that won't respond to Ctrl-Alt-Del, because you can then be certain that the system will restart with a clean slate.

An inadvertent press of the reset switch can be a disaster. It can strand temporary files or even scramble the file structure on your hard disk, causing additional loss of storage capacity. Generally you can solve these problems by deleting stray temporary files and running ScanDisk, but I believe in a more aggressive solution. To remove the danger your reset switch poses, you can simply disconnect it.

Open your computer case. The wires from the reset switch connect to two pins on the motherboard. Remove the wires from those pins, and you disable the reset switch. Now you're safe from accidental resets.

—Alfred Poor

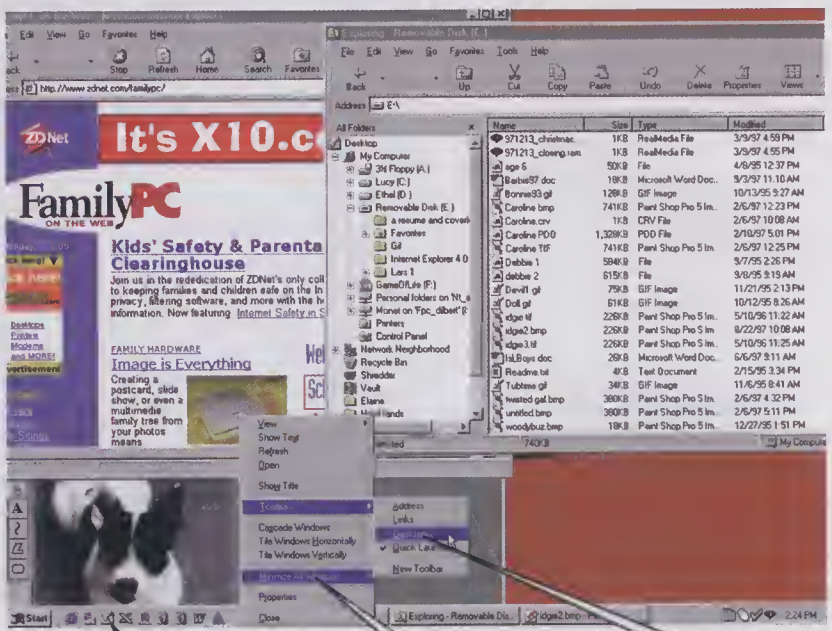
WINDOWS 95/98 TIPS

Clear Your Cluttered Desktop

Windows 95 and 98 let you place shortcuts to frequently used programs and documents on your desktop so you can access them quickly. The problem is that if you have several windows open at once, you can't get to your desktop shortcuts. Here's how to get around a cluttered desktop so you can get to your shortcuts.

Minimize with a keystroke:
If your keyboard has a Windows key – the key with the flying window emblem – you can minimize all open windows by pressing the Windows key and the *M* key at the same time.

View your shortcuts:
To use your keyboard to access shortcuts you've created, press Ctrl-Esc to activate the Start button, press *R* for Run, enter a period in the Open box, and press OK. This opens a window containing your desktop shortcuts. One limitation to this approach is that the window will not include the icons that Windows places on the desktop by default, such as My Computer or Network Neighborhood.



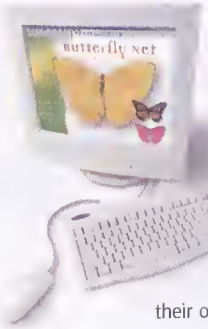
Minimize with Quick Launch:
If you have Microsoft Internet Explorer 4.0 or Windows 98 installed and have chosen to show the Quick Launch toolbar, it has a Show Desktop icon by default. Click on it to minimize all open applications.

To get an instant view of your desktop:
On any Windows 95/98 system, right-click on an empty space on the taskbar at the bottom of your screen. From the pop-up menu, choose Minimize All Windows.

Add shortcuts to the toolbar:
If you're running Windows 98, right-click on the taskbar and choose Toolbars from the pop-up menu. Now select Desktop. This adds all your desktop shortcuts to a scrolling region on the taskbar.

Collect your thoughts.

iomega.



Get organized.

It's simple. Organize with Iomega® Zip® disks and you put your mind at ease. The 100MB disks come in five different colors, giving you a quick, easy way to keep track of all your important files. Simply save all the versions of your "Earth's Eco-System" presentations on a red Zip disk. Then save all your favorite Web downloads on "Butterflies" on the black one. And so on. Got kids? Great. Give each of them a disk of their own. Organized life, organized mind.

Organize yo
the rest wil

With 70 times more space than a floppy, Zip disks are perfect for organizing work, home, and everything in between.

Organize your projects.

Say you're developing a multi-page Web site for "Blue Revival Records." An independent label bringing jazz music to a whole new crowd. You have hundreds of stunning video clips, photos, sound bytes, illustrations, special effects, layouts, and text. Not to mention pages and pages of mind-numbing code. Simply save and catalog everything onto one 2GB or 1GB Jaz disk. Now every element, and revision, will be in a single, safe place—no matter what crazy direction the Web site might take.

Your favorite Web downloads.

Your business presentations.

Your kids' files.

Video clips for site.

Photos for site.

Site

www.iomega.com for software tools, Norton™ Zip® Rescue download, new products, and more.

your life, will follow.

Introducing the incredibly small, highly portable 40MB Clik!™ drive and disk. Created for mobile computers, HPCs, and digital cameras.

Actual size: 2" x 2"

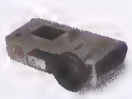
With the new Iomega Jaz 2GB drive, you can organize your life's biggest, most important work. And it's backward-compatible with the millions of Jaz 1GB disks out there.

Organization to go.

When you're on the go, you need an easy, compact way to keep everything together. That's why we created the new Iomega Clik! drive and disk. Just pop the revolutionary 40MB disk into the Clik! drive attached to your laptop and keep all your files in their own little carrying case. The Clik! disk is also changing the way you take photos. It acts as your digital film. Simply download the shots off your digital camera and save up to one hundred photos per disk before downloading to your computer. Imagine how easy it will be to store your photos on Clik! disks and find them again.

Site layouts.

Audio for site.



Your digital photos.

Your travel itinerary.

Your business contacts.

www.iomega.com for software tools, Norton™ Zip® Rescue download, new products, and more.

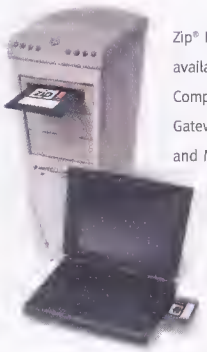
Get organized. Get Iomega.

zip®

New USB drive

The reliable, portable Zip® drive and disks make an ideal gift for the holidays. And, coincidentally, the colorful 100MB Zip disks are about the width of a stocking. This year give them Zip.

New Zip external drive (USB)	**$149.95**
Zip external drive (PPT or SCSI)	**$119.95**
Zip internal ATAPI drive	**$99.95**
Zip notebook drive	**$199.95**



Zip® Built-In™ drives available in Apple, Compaq, Dell, Gateway, HP, IBM, and Micron.

Looking to buy a PC? Specify one with a Zip drive already built in.

Zip disk 10-pack	**$99.95**
Zip disk 6-pack	**$79.95**
Zip disk 5-pack	**$69.95**
Zip disk 3-pack	**$49.95**
Zip disk 2-pack	**$29.95**

jaz®

New low price

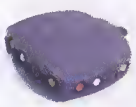
What to do with that holiday bonus you gave yourself. How about a Jaz® drive? It's a great way to start saving the new year.

Jaz 2GB external ultra SCSI drive **$349.95**
Jaz 2GB internal ultra SCSI drive **$349.95**

Jaz 2GB single	**$124.95**
Jaz 2GB 3-pack	**$299.85**
Jaz 1GB single	**$99.95**
Jaz 1GB 3-pack	**$269.85**

buz™

It's the easiest way to get your holiday videos onto your PC. Then keep them safe on Zip or Jaz disks.



Buz™ for PCs	**$199.95**
Buz™ for PowerMac G3	**$299.95**

clik!™

Available soon

Incredibly small, highly portable storage for digital cameras, mobile computers, and HPCs.

Clik!™ drive for Mobile Computers and HPCs	**$199.95**
Clik!™ drive for Digital Cameras	**$249.95**
Clik!™ drive Plus for both	**$299.95**

Clik!™ disk as low as **$9.95**

Buy from your favorite computer seller:
Best Buy, CDW, CompUSA, MicroWarehouse, Multiple Zones, PC Connection, PC Mall, Office Depot, OfficeMax, Staples.

iomega.

Or visit www.iomega.com for more information or to order.

Copyright © 1998 Iomega Corporation. Iomega, Zip, and Jaz are registered trademarks, and Buz, Clik!, Zip Built-In, and Zip Rescue are trademarks of Iomega Corporation. Norton and Norton Rescue are trademarks of Symantec Corporation. All other trademarks are the property of their respective holders. Prices listed are estimated street prices. Actual prices may vary.

HandsOn

Make Personalized Sports Cards

What you need: MGI PhotoSuite, scanned photo
Platform: Windows 95
Time required: 15 minutes

If your child is into trading cards, or if you're just looking for a great way to capture her season, you can make a pocketful of personalized cards using your computer. MGI PhotoSuite (Windows CD, $29.99; MGI Software, 800-656-5426, www.mgisoft.com), a photo-editing program, includes sports cards as one of its projects. If you don't have PhotoSuite, you can use just about any home publishing program, or even a word-processing program that lets you input images.

Before you start, however, you need to scan the photo that will appear on the card. PhotoSuite comes with a roll of Kodak film and a special offer for digitizing your pictures and putting them on a floppy disk or CD-ROM for less than $15. You can also use a digital camera, a scanner, or other scanning services, including PhotoNet (an online service) or your local copy shop.

1. Pick a Picture

Launch PhotoSuite and select Create a Sports Card from the MGI Activity Guide. Use the dialog box that appears to select the image file you want to use for the front of the card.

2. Make It Fit

When the image loads, click on one of the handles that appear around it and, while holding the mouse button down, move the mouse in or out to shrink or stretch the image to fit the card. The only part of the image that will print is the portion that appears in the template. Once you've made the image fit, use the mouse to center it on the card template.

3. Print the Picture

Print the front of the card by clicking on the printer button along the taskbar. For best results, use quality ink-jet paper.

4. Add Some Stats

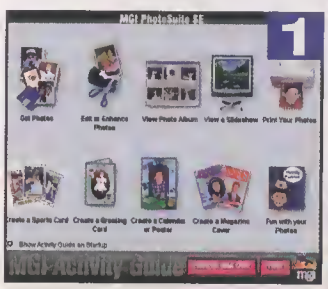
To create the back of your sports card, click on Fun on the taskbar, and scroll down to Sports Card Info. In the appropriate fields, enter information about your child (name, home town, position, team, league, and coach). After you ent stats, print the back of the card.

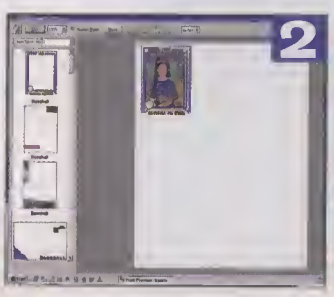
5. Make It Stick

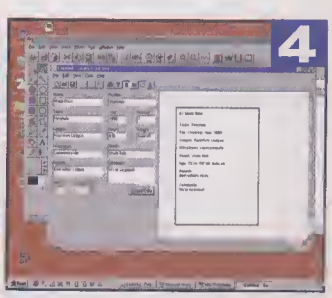
Use the border of the card as a guide and use scissors to trim both printouts. PhotoSuite provides card stock, cut to size, with an adhesive surface on both sides. Peel back the covering of one side of the card stock, carefully align one of the printouts, and affix it to the sticky side. Repeat this step for the opposite side of the card. (Be sure both sides of the card are oriented the same way.)

Now be prepared to repeat the process for every member of your child's team.

—Sam Mead







HandsOn

Uninstall Software the Right Way

What you need: Uninstaller utility such as CleanSweep
Platform: PC running Windows 95 or 98
Time required: 2 to 30 minutes, depending on the cleanup chore

TO DO: Clean kitchen floor, wash car, sweep out computer. If that last item isn't normally on your list of weekly chores, it should be. Cleaning out your computer means cleansing it of junk files, not-run-in-years applications, and the debris that just naturally accumulates when you surf the Web, do homework projects, or bring work home from the office. A good cleaning with an uninstall utility makes your computer run faster, may prevent some nasty crashes, and frees up hard disk space that you can use to stash really important stuff.

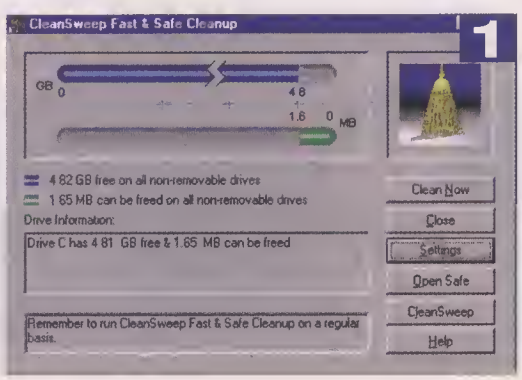
And don't think you can get by with the Add/Remove Programs utility that Windows tucks into your Control Panel. A good remove-it program, like Quarterdeck's CleanSweep or CyberMedia's Uninstaller, launders your PC faster, more thoroughly, and, best of all, a lot more safely than Windows' tool. To scrub down your PC, just follow our five-step squeaky-clean plan.

1. Do a Fast Cleanup

Ah, the irony: To uninstall, you must first install the uninstaller.

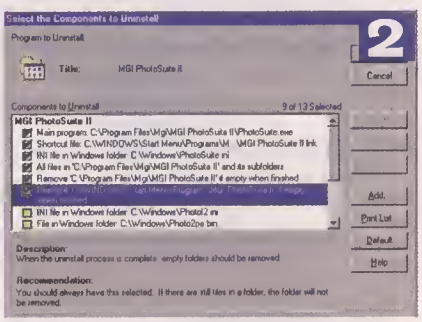
Once CleanSweep's hands-off installation finishes, and after it inventories your hard drive's contents (so it can better eradicate any of the 1000 or so programs in its cleanup database), launch Fast & Safe Cleanup by clicking on the desktop icon. Fast & Safe plays true to its name. This down-and-dirty dirt remover deletes temporary files (those in the TEMP folder), empties the browser cache, and erases what's in Windows' Recycle Bin. Although your extermination mileage may vary, you should be able to reclaim several megabytes of hard disk space without breaking a sweat.

You can automate subsequent cleanings by clicking on the Settings button and then on the Schedule tab. For an always-clean machine, check the box for At System Startup, and click on OK. Now Fast & Clean will run each time you turn on your PC. Think of it as a quick dusting.



2. Uninstall Any Program

You can exterminate any application and all its associated parts by clicking through a bunch of screens. Open CleanSweep,



make sure the Program display is active (click on the Program tab if it's not), and click on the Uninstall Wizard button. Pick the soon-to-be-gone program from the Explorer-like list. (If it's not there, hit the Search button to dig through the drive manually.) CleanSweep analyzes the application and, by default, creates a backup copy of the deleted files so that you can restore it later if you want. It also tells you how much room you'll save.

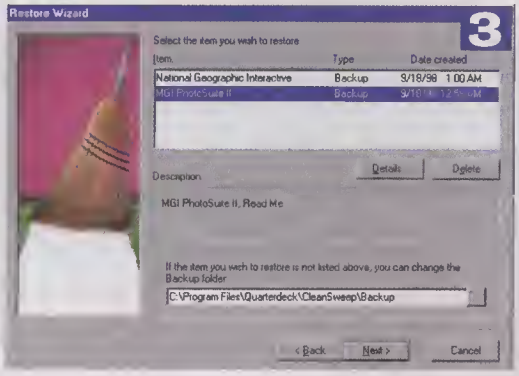
You can either let CleanSweep do the uninstall unsupervised or review its deletion decisions before they execute. The former method is faster (I deleted a 45MB application in just 86 seconds); but unless you're really in a hurry, take the time to check out the utility's intentions. Click on the View button at the end of the wizard, and scroll through the file list. You can

ILLUSTRATION: ROBERT PIZZO

HandsOn Uninstall Software

uncheck items you don't want removed.

Unlike the uninstallers built into Windows 95/98 software, CleanSweep prevents you from making grievous errors. Its Safety Sweep blocks the deletion of any file that CleanSweep says may be crucial to other software or to Windows itself. I suggest you leave Safety Sweep turned on, but if you think you know more than the program, you can deactivate it (and thus delete potentially critical files). To do so, return to the main CleanSweep window and click on the Options tab, the Configure CleanSweep button, the Safety Sweep tab, and then the Off button at the bottom.



3. Undo Uninstall Goofs

Uninstallers pay for their supper by letting you change your mind. Whether it's been 10 minutes or 10 days since you erased a program, you can undo the uninstall.

CleanSweep reclaims liquidated applications because it creates compressed copies of any removed files and stores them on the hard disk. (Yes, that means you typically recover about half as much disk space as you would if CleanSweep didn't produce backups — one reason why you can disable this automatic backup feature if you want.)

To resurrect an application, launch CleanSweep; click on the Restore tab and then on the Restore Wizard button. CleanSweep knows which application it removed most recently, and it offers that one for recovery first. You can select others from a list of all uninstalled software.

Work through the rest of the wizard — you'll almost always want to use the default answers — and when the restoration finishes and the backup copy has been deleted, check that the program works properly by running it and trying out a few operations or commands.

4. Clean Out the Corners

Electronic exorcist that you are, you fear nothing. Not even dreaded duplicate files, redundant DLLs, or orphans. An uninstaller lets you clean out all that dirt and more from the corners of your hard disk.

CleanSweep groups these chores on its Cleanup tab, so head there after launching the utility. Each task — clearing duplicate files, unnecessary DLLs, long-unused files, and orphans (files left behind after an incomplete uninstall) — begins with the click of a separate button.

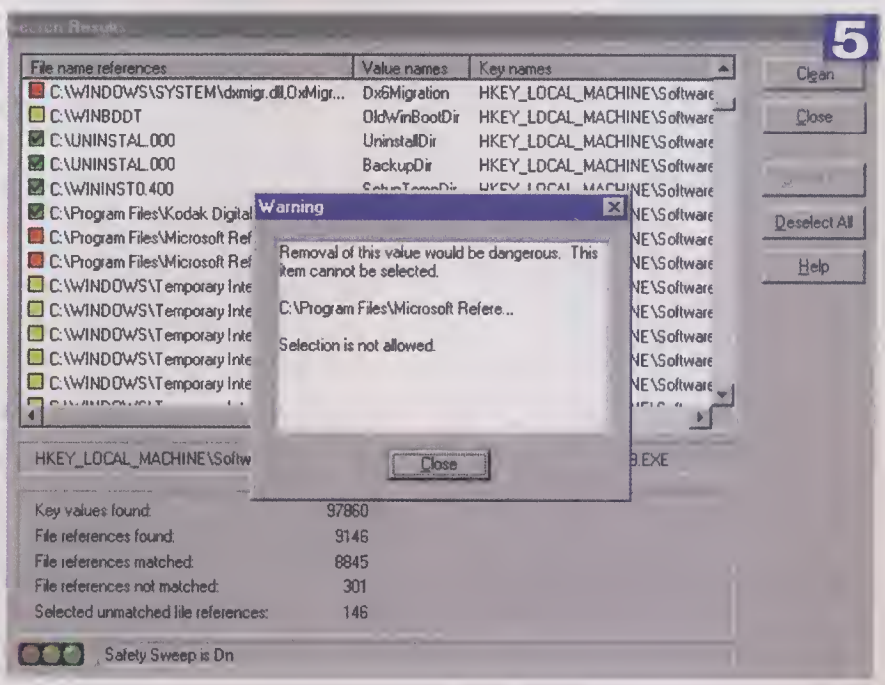
To throw redundant DLLs off the drive, for instance, click on that button on the display. CleanSweep sniffs them out and then assembles a list of the possibly superfluous using color codes — green for OK to delete, yellow for caution, red for no way. CleanSweep even gives you additional delete-or-not information when you click on the Advice button — handy for experienced users who want to clean thoroughly. Of course, CleanSweep makes backup copies of the deleted DLLs, too, so you can restore them if you later discover they're crucial to your PC's health.

5. Scrub the Registry

As the Windows Registry becomes cluttered with old-but-now-unnecessary entries, your PC may act oddly, balk at commands, or simply not work right. But playing with the Registry — the place where operating system and application settings are stored — is like playing with matches near an open gas main: You're bound to get burned. If you corrupt your registry, your computer may not even boot.

Any uninstaller worthy of the name includes a Registry cleaner; CleanSweep's no exception. Run CleanSweep, click on the Registry tab, and then click on the Registry Sweep button. CleanSweep examines the Registry (it may take several minutes), locates invalid entries (often there because applications have been deleted manually or before the uninstaller was installed), and displays them. As usual, CleanSweep plays it safe and lets you eliminate only those entries it deems safe to erase. Click on the Clean button to do just that.

—Gregg Keizer



If this child's parents had bought him Math Blaster® Software Ages 9-12, right now, he might be multiplying equations with three operands, identifying complex patterns, building equations, and adding fractions with uncommon denominators. Just something to think about.
MATH BLASTER. How The Smart Kids Get That Way.™
READING
WRITING
SPELLIN
VOCABU
PRE-ALG
www.blasternaut.com
Knowledge Adventure
MATH BLASTER
Call 1-877-832-2477 for a FREE Blaster Learning System™ trial CD-ROM.

A special section for teachers and interested parents

SchoolPC

A GUIDE TO COMPUTERS IN THE CLASSROOM

Teach the Teachers

A RECENT STUDY by Educational Testing Services found that students whose teachers were skilled computer users outperformed students whose teachers were not. It also found that teachers proficient in the use of their classroom computer enjoyed higher morale and lower absenteeism. The moral of the story is clear: Both teachers and their students benefit when teachers know how to use the computer effectively.

But where do you get this training, and how do you pay for it? In an ideal world, the school district would provide the training, but with strained budgets, this is an expense that is often pushed to the bottom of the priority list.

Fortunately, a host of grants and online resources are now available to teachers for professional development. Check below for a glance at some of the resources.

* **ICONnect** (www.ala.org/ICONN). This free online classroom covers the basics, such as how to use e-mail, as well as more advanced topics, such as how to use search engines effectively and how to build your own Web page.
* **WWW4 Teachers** (www.4teachers.org/home/index.shtml). The Tech-Along section features how-to advice on technology for teachers. You'll find help on topics like managing a one-computer classroom and building a Web site.
* **Technology and the New Teacher** (www.teachnet.org/blueplate/homework/newteach11.htm). This site, compiled by an experienced technology teacher, has tutorials on subjects such as word processing, e-mail, software, and networking.
* **Teachers.Net** (www.teachers.net). This extensive site features live professional development sessions on a host of topics. Recent chats focused on e-mail, search engines, and troubleshooting. The chat archives are also available. Go to the Chatboards for even more help. —*Valle Dwight*

PHOTOGRAPH: DAVID SACKS/FPG

Industry Gets Involved

FamilyPC offers Teachers' Technology Grants to help teachers integrate technology in their classrooms. They are made possible through the generous support of these companies:

- Microsoft Corporation
- Houghton Mifflin Interactive
- Intel Corporation
- Corel Corporation
- Stagecast Software
- Knowledge Adventure
- Disney Interactive Learning Series
- Scholastic Software Clubs
- Panasonic Interactive
- password.com
- 3Com Corporation

You can find out more about these companies and their products, and more about the *FamilyPC* grants, by visiting www.schoolpc.com.

Professional Development Grants

* AT&T Learning Network Grants Program (www.att.com/foundation)
* Teachers Network (www.teachnet.org)
* NFIE Leadership Grants (www.nfie.org)
* Virtual Schoolhouse Grant Program (www.cisco.com/edu/programs/schoolhouse/index.html)

Training the Next Generation

When educators and technology professionals team up to train high school students in high-tech skills, good things happen. In the short term, schools get skilled technicians to help with computer problems. In the long run, students are trained to step into lucrative jobs after graduation.

The Oracle Secondary Education Academic Alliance Program (800-633-0584 ext. 8730) trains teachers

> Students are trained to step into lucrative jobs after graduation.

and students in database technology from Oracle. Now in its fifth year, the program provides both training and software. Once students are trained, the school teams up with local businesses that offer technology positions.

Another 200 high schools across the country have joined Novell's Education Academic Partner (education.novell.com) program to teach effective network administration to teachers and students.

"We have a very basic need to train kids on the hardware side and give them a full, well-rounded technical background," explains Lorraine Langille, technology director for the Northbridge Public School District in Northbridge, Massachusetts, where approximately a dozen students are enrolled in NEAP. *–Esther Shein*

BASIC Humor This programming tutor uses fun animations and skits to keep kids engaged.

Back to BASICs: If your students are eager to learn computer programming, check out Learn to Program BASIC (Mac and Windows CD, $35; Interplay, 800-468-3775, www.interplay.com). Junior high school students take 10 half-hour lessons (with over 50 interactive exercises) on the fundamentals of computer programming. The software lets kids edit code on some completed games or create their own games from scratch. (See this month's Software Reviews.)

No Excuses: Now your students can never claim that they forgot what the homework assignment was. With HomeworkNOW (www.homeworknow.com), teachers can post homework assignments and other class information on the Web, where students and parents can have access to it anytime. Schools can get a free 30-day trial, and after that the charge is $1 per pupil in the school, up to a maximum of $250 a year.

Calling All Newshounds: CNN Student Bureau, which launches in January, lets aspiring reporters publish their stories internationally. High school and college student reporters get news assignments over the Web from editors at Turner Learning (learning.turner.com), who also judge and fact-check the stories. Some stories will be aired on CNN Newsroom, a commercial-free program for schools, and at the Turner Learning Web site. Some may even be broadcast on the CNN News group. Call 800-344-6219 or go to learning.turner.com for more information.

Put Your Computer to Work

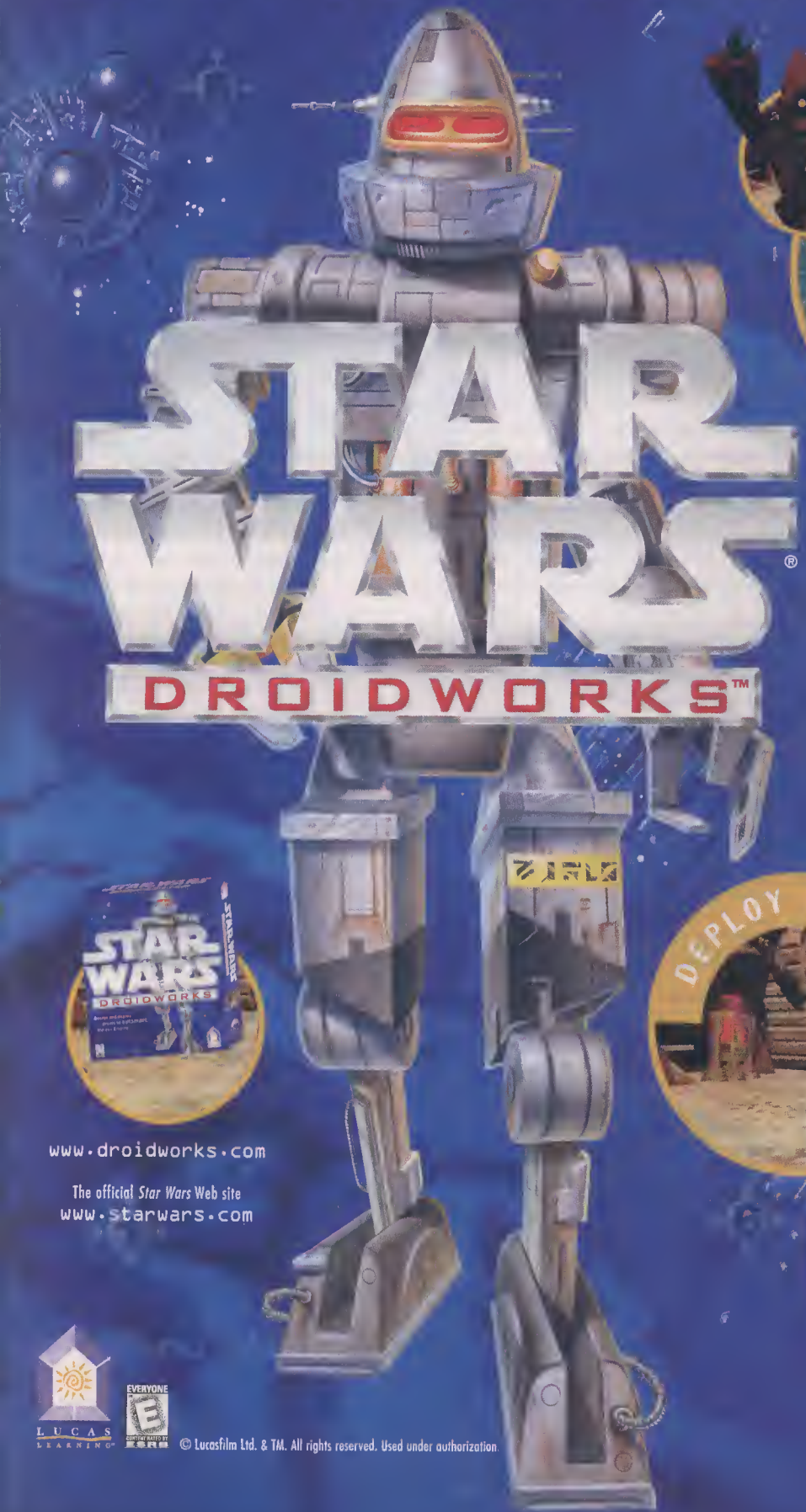
IN AN IDEAL WORLD, it would be easy for teachers to pick and choose the best parts of educational software programs to match their curriculum and each student's learning style. This is where ClassWorks, a new curriculum and classroom management program for grades K–8, steps in. This powerful tool puts one interface on 150 included software programs (from top publishers including Davidson, Knowledge Adventure, Tom Snyder Productions, and MECC), seamlessly integrating them into one curriculum. Teachers can also add any other software to the ClassWorks program.

When students sit down at the computer, they log in with their name, and a preset lesson plan comes up, with all the appropriate pieces of programs to reinforce the lessons. So if your fifth-graders are studying fractions, for example, they might get one activity from JumpStart 5th Grade and another from Math for the Real World.

ClassWorks is fully customizable, so teachers can create separate assignments for each student, depending on the child's skill level in each subject (currently, ClassWorks covers only math and language arts). The program tracks each student as he or she progresses through an assignment, so the teacher can instantly see where a student needs extra time or help.

On the administrative side, ClassWorks tracks enrollment and curriculum and lets teachers create reports on students' progress. *Knowledge Adventure, 800-545-7677, www.adventure.com; customized pricing, from $20,000.*

CAN YOUR DROID CUT IT?



STAR WARS®
DROIDWORKS™

> Can you design a droid with the mettle—and metal—to outsmart the Empire? Can your droid tread triumphantly through 29 torso-twisting missions to save the Rebel Alliance from deadly assassin droids? Open the two-ton door that's threatening to crush its beryllium-bronzed bones? Or use an Automaton High-Energy Power Welder to cut through 150-gauge steel? Build wisely and your droid should be able to cut it. So perhaps the real question is: Can you?

www.droidworks.com

The official *Star Wars* Web site
www.starwars.com

LUCAS LEARNING™

EVERYONE E CONTENT RATED BY ESRB

© Lucasfilm Ltd. & TM. All rights reserved. Used under authorization.

All the News That's Fit to Teach

Students get a lot more than current events at the *New York Times*' excellent Learning Network (www.nyt.com/learning). The site is chock-full of information and resources for getting in-depth information on the news of the day. It also shows civic-minded kids how to write a letter to the editor and ask questions of reporters.

When students read a story, they just have to click on a word to get its definition from the dictionary. And if they don't know where the place is that they're reading about, they can simply click and see the country on a map. There's fun stuff, too. Each month, the site features a new crossword puzzle based on an academic theme.

The Daily News Quiz tests students on their knowledge of current events.

Grownups aren't left out, either – teachers can get daily lesson plans (which are also archived by subject area), check out the latest education news, and link to other relevant sites on the Web. For parents, there is a discussion area for sharing ideas on topics such as charter schools, Internet safety, and technology in the classroom. Parents can also read reviews of educational products.

–Valle Dwight

Desert Show: If your class is studying wildlife or the earth's ecosystems, check out Living Deserts & Rainforests, software that lets you (or your students) create a lively multimedia presentation in just minutes. You begin by browsing dozens of sound, video, and photo clip art on either deserts or rain forests. Select your favorites and then record your own narration, type in text, add background music, and paste it all together. Press a button and presto — you've got a presentation that will keep your students riveted. A great teaching tool, it's also simple enough for students 10 and up to use. *Bytes of Learning, 800-465-6428, www.bytesoflearning.com; Mac and Windows CD, $29.95.*

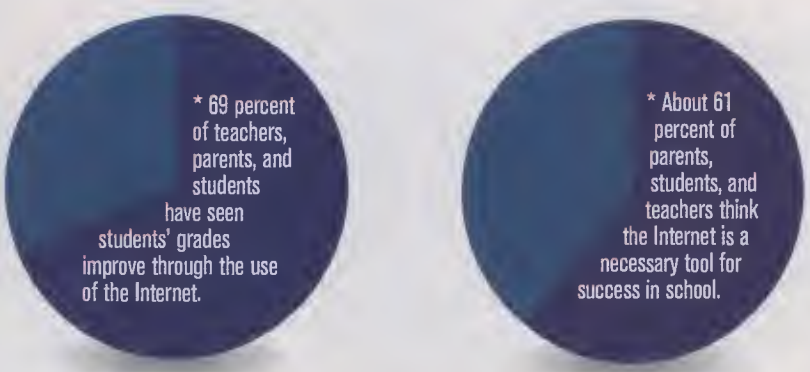
Jazz It Up: There's a new kid on the block of multimedia authoring tools. Cocktail '98 (Windows, $99; Samsung, www.cocktail98.com) lets teachers and students add video, music, animations, and photos to their reports or presentations. Within the program are five workshops that teach you how to edit images, add sound effects, and create Web pages. There are also wizards to help you import all the elements you want, including video, text, and images.

Grant Watch: Growth Initiatives for Teachers, a grant program for junior high and high school teachers, rewards teams of teachers that integrate math and science and use technology in an innovative way. Each winning team receives $7000 for the project and $5000 for professional development. You can download an application at www.gte.com/g/community/gift.html. Applications are due by January 15, 1999.

Digital Study Hall: For students who need some help with their homework or a little tutoring on the side, check out Tutornet (www.tutornet.com), a subscription online service that offers interactive instruction to students of all ages. Students log on and choose a subject area; then they are sent to a "classroom" where a tutor (called a *Netucator*) greets them. Tutors and students use a virtual white board where they can easily draw shapes and symbols or write freehand. Tutornet costs $59.99 a month for unlimited access, and the company is working with corporations to donate subscriptions to schools.

Better Grades on the Web

Add Internet access to the list of requirements for a well-equipped school. In a nationwide survey of 2416 people, AT&T WorldNet Service found that the Web has become a necessary tool for schools. The respondents also said the Web improved students' grades.



Source: AT&T WorldNet Service

Class Act

Out of This World

Technology helps students imagine the final frontier

Holly Thomas, an environmental science teacher in Jacksonville, Florida, has done such a good job teaching for the past 25 years that today she's been promoted right out of her classroom. Thanks to an Urban Systemic Initiative grant, she's working with other science teachers all around Duval County, Florida, to improve science education through technology and other innovative teaching tools.

Part of what led Thomas to her new position was an extensive hands-on project in which her eleventh- and twelfth-grade ecology students "built" an imaginary new civilization in outer space. Throughout the project at the Robert E. Lee Senior High School, technology played a major role, with students consulting Web sites, watching QuickTime movies, and more.

"In this project, students create their own solutions, solve their own problems, and make their own studies."

–Holly Thomas

The year started with the students studying overpopulation and global warming, to give the class a rationale for why they would have to colonize another planet.

The next step was to decide where to go. After exploring Solar System Live (www.fourmilab.ch/solar/solar.html) and Nine Planets (seds.lpl.arizona.edu/nineplanets/nineplanets), the class decided that its new home would be Miranda, a moon of Uranus.

Although the proposed new home was definitely a "handyman's special," featuring a rocky, icy landscape and a climate appealing only to polar bears, Miranda did have all-important sources of energy nearby, in the form of geothermal activity in neighboring volcanic moons.

Transportation was the next problem: How would they reach Miranda? To answer that question, the intrepid explorers took to the football field, armed with rockets made of balloons, paper cups, and string. But when these vessels wouldn't go far enough, Thomas challenged her students to do better. "Before I knew it, two boys attached a kind of sail to their ship and flew it right into the end zone," said Thomas. After that discovery, the students researched solar sails on the Web and used a radiometer to demonstrate how the sun's light would push the ship.

The students now faced the issue of housing. Once again, they turned to the Web for inspiration, exploring sites on ancient civilizations and the castles of Europe. They came up with several options, including adobe villages (well suited to Miranda's cliff-laden landscape), igloos, cave dwellings, and fortresses. The students investigated Web sites on Biosphere 2, including www.bio2.edu, for tips on how they might grow food.

At the end of the year, Thomas's Project Miranda made it onto the local news, an event that thrilled the teenage space settlers. "Students spent months researching their topics, often online — probing, questioning, answering, and questioning again," said Thomas. "And then they shared their expertise with the group. This approach allowed each student to shine."

—Cristine Santo

PHOTOGRAPH KELLY LA DUKE

Teacher's Pets

Strange Science

(www.turnpike.net/~mscott)

Follow the twisted path scientists took to come up with modern theories of paleontology and biology. In the Goof Gallery, you'll find renditions of what scientists in the fifteenth century thought elephants, unicorns, and giraffes might look like (from what they'd heard by word of mouth or via myths).

Puzzlemaker

(www.puzzlemaker.com)

Teachers can create their own puzzles at Puzzlemaker. Choose from criss-cross puzzles, number blocks, cryptograms, and letter tile puzzles. Word searches are even more fun when you personalize them with words from your classroom. The site also has stunning hand-drawn mazes to download.

The Charters of Freedom from the National Archives

(www.nara.gov/exhall/charters)

Students can look at scanned versions of the original Constitution, Bill of Rights, and Declaration of Independence. The complete transcription of each document is also available.

–Valle Dwight

Have Computer, Will... What?

Teachers share strategies on using a classroom's lone PC

By Bruce Watson

ON THE FIRST DAY of school four years ago, fourth- and fifth-grade teacher John Baggett lugged his brand-new PC to school, plopped it on his desk, and pretty much let it sit there. For a month, he used it to make lists or write notes to parents. Then, when his students protested that he was keeping the computer to himself, he decided it was time for them to use it, too. But how do you share one computer with 25 students? Should they each get one day a month? Should they all cram around the monitor at once?

Four years later, Baggett is a master at that most modern teaching skill — managing a one-computer classroom. Blending kid management with software strategies, he uses his PC in almost every daily lesson. He groups students into teams that make multimedia reports. He plugs his computer into a wall-mounted TV to play games with the whole class. He uses the computer as a reward, a drill master, and a portal to the Web.

PHOTOGRAPH: NINA WINTER

A student-computer ratio of 25-to-1 doesn't have to be daunting. It just takes planning, a skill most teachers learned long ago. "You have to be flexible," Baggett said. "Don't try to learn computer skills in your spare time, since as a teacher, you don't have any. If you don't know a certain program, don't be afraid to let kids teach you how to use it. You have to adjust your style."

Divide and Conquer

Baggett's computer tactics vary from subject to subject. In science, his students work in teams at different workstations, one of which is the computer. The goal is for each of four teams to create a multimedia presentation on a particular research topic (last fall, it was oceans).

At the class's print encyclopedia, one team pages through volumes, making notes for its initial research. Nearby, another team is at the "card-planning station." There, students stack index cards, blocking out where they'll use text, where they'll put the photos, and where they'll insert sound clips to enliven their report. Across the room, a third team is in preproduction, writing the actual text of the report and deciding on final design. And at the computer, a fourth team is assembling its report with HyperStudio (Mac and Windows CD, $199.95; Roger Wagner Publishing, 800-421-6526, www.hyperstudio.com).

Every 15 minutes, the teams switch stations. When the reports are finished, Baggett displays them on the TV he has plugged into his PC using AverKey Plus ($99; AverMedia, 510-770-9899, www.avermedia.com), a device that turns a TV into a computer monitor.

Other subjects require different computer-sharing strategies. In geography, again using the TV hookup, Baggett plays National Geographic's GeoBee. As questions appear on-screen, arms go up, begging to give answers. In math, pairs of students who haven't mastered their times tables take time out to drill with MathBlaster.

For English lessons, Baggett uses the computer as the class printing press. Kids write their re-

A student-computer ratio of 25-to-1 doesn't

ports in longhand, with an eye toward using the desktop publisher in the corner. Only when they have produced a workable final draft can students type it into the computer and print it.

And in social studies, Baggett often has the entire class create one presentation, dividing a topic into parts. When the class was studying cities, each student picked a letter of the alphabet and found a corresponding city: Albany, Boston, Chicago, Detroit.... The students researched their cities, and then each reserved time on the computer to make his or her report. When Baggett put the reports together, the result was an urban alphabet that enthralled the entire class.

Baggett keeps a sign-up sheet where kids can reserve blocks of time on the computer to play educational computer games, type with Mavis Beacon Teaches Typing, or log on to their favorite Web sites.

Other Sharing Techniques

A teacher in Deerfield, Massachusetts, makes her lone computer feel personal to a classroom full of students by sending students research assignments via e-mail. From her home computer, sixth-grade teacher Julie Webster e-mails questions to teams of students. First thing in the morning, the teams take turns checking their e-mail. Finding their question, they search the Web for answers. Instead of scrawling their response on paper, they just hit Reply to send the answer, and Webster grades the work at home.

Mary Van Dyke, an elementary and middle school teacher in Atchison, Kansas, uses her only classroom PC to teach computer skills such as databases and spreadsheets. She introduces databases by having students collect data on each other. After compiling lists of their friends' favorite TV shows, food, books, and so on, Van Dyke's students learn to create databases by entering the personal information.

To teach spreadsheets, she sets up a simulated business, with herself as employer and students as employees. Each assignment earns a paycheck, and each missed assignment results in docked pay.

In both cases, students work at their desks and sign up to use the classroom's computer when they are ready to enter their data.

Sharing the Knowledge

Just a few years after he took his first computer workshop, Baggett is giving workshops himself as Newcastle Elementary School's technology mentor. Along with planning, he tells teachers to consider placement: Don't put the computer where everyone in the class can easily see the screen — it can distract the students who aren't using the computer from completing their other work. And Baggett advises that you use the computer as an opportunity to form interesting peer groups.

"Some kids are wizards at the computer, and others are beginners," Baggett said. "I group the experts with the kids who don't have a computer at home. At a computer, kids are good at helping each other; within a few months, their skills level out a lot better than they do in reading."

Baggett has a final tip for teachers: Don't forget to use the computer yourself. Computerized gradebooks like ClassMate Grading Tools (www.classmategrading.com) make grading easier. Banners printed using your desktop publishing program can decorate bulletin boards better than construction paper letters. And reaching some parents via e-mail may be a lot easier than reaching them by phone.

Teaching with one computer may start out as an assignment. But like students who are apprehensive when you introduce a new topic, teachers discover that once they get the hang of it, a computer can be more than another warm machine in the classroom. Used well, it's a teacher's best aide.

Bruce Watson *is a frequent contributor to* FamilyPC. *E-mail him at BWatson@crocker.com.*

Tips from the Trenches

* Use sign-up sheets.
* Break large subjects into individual topics.
* Make assignments that kids can do at their desk and jazz up later at the computer.
* Use multimedia authoring tools so the kids can create reports for all to see.
* Get a scan converter or a projector so you can share the projects with the whole class.
* Use the computer yourself for grading, creative projects, and e-mail.
* Don't be afraid to let kids teach you how to use the computer.

have to be daunting. It just takes planning.

A Whale of a Movie

Fourth-graders combine clay and computers to create a claymation video

Project Name:
Whales' Tales Claymation Video

Grades:
4 to 6

Time Line:
3 weeks

Subjects Taught:
Science, language arts, geography, art, technology

"The excitement I see in the children when they're using technology is very rewarding. They're enthusiastic about wanting to learn."

–Linda Dombchik

THE VOTE IS IN, and it's unanimous: Claymation — the expressive animation of clay characters — is cool. From the original California Raisins, who entertained us with their soulful rendition of "Heard It Through the Grapevine," to today's Celebrity Death Match, an MTV show pitting clay versions of famous people against each other, claymation brings creatures to life in a way no other medium can touch.

So it's no wonder that when it was time to study whales, Linda Dombchik's fourth-grade class at the Hebrew Day School of Central Florida in Maitland, Florida, was excited about creating a claymation video of the great mammals strutting their stuff. In the end, their video featured whales sounding, breaching, skyhopping, flippering, sailing, lobtailing, and spouting. The claymation movie was part of Dombchik's larger unit on whales, which was a winner in the Ed's Oasis MasterSearch Contest (www.edsoasis.org).

To Participate:

* **Week 1:** Research whales (or any other animal easily rendered in clay). Dombchik's students used Grolier Multimedia Encyclopedia (Mac and Windows CD, $39.95; 203-797-3530, gi.grolier.com), In the Company of Whales (Mac and Windows CD, $34.95; Discovery Channel, 800-889-9950, shopping.discovery.com), and The Magic School Bus Explores the Ocean (Mac and Windows CD, $19.95; Microsoft, 800-426-9400, www.microsoft.com). Your class could also try such Web sites as Zoom Whales (www.enchantedlearning.com/subjects/whales) or WhaleNet (whale.wheelock.edu). Collect information on their habitats, behaviors, characteristics, and activities.
* **Week 2:** On cardboard or fabric, paint scenic backdrops for your whales' movements. Sculpt your lead whale with nonhardening modeling clay. Consider building the sculpture around pipe cleaners for strength and flexibility.
* **Week 3:** Shoot the video: Place the backdrop on the floor and position your whale in its first pose. Shoot several seconds of video from above. Stop recording. Advance the whale's pose slightly. Shoot again. Continue until you complete the desired movement. Be sure to keep the camera in the same place throughout the shoot. The more shots you take, and the shorter the duration of the shots, the smoother the resulting motion will be.
* **Week 3:** Import the resulting video into the computer (see "Helpful Hint"). If individual shots are too long, students can edit them down. Add sound effects, titles, graphics, and music at this point. Save the result as a QuickTime movie and put it on your class's Web site, if you have one. If you don't have a Web site, convert the movie back to VHS format and invite other classes and parents to a special screening. (Don't forget the popcorn.)

Visit Linda Dombchik's site at www.hds.pvt.k12.fl.us/whales.html for additional details.

—Cristine Santo

Into the Breach After studying whales, students made a claymation video.

Helpful Hint

To capture and edit video images on your PC, you'll need a video camera and a multimedia hardware/software package such as The Iomega Buz for Windows or Power Mac G3 ($199.95 and $299.95 respectively; 800-697-8833, www.iomega.com). Editing software is included. When you're done, you can save your masterpiece on videotape or in a digital format (such as QuickTime, MPEG, or AVI).

"Get ready for the postage rate increase..."

"...with a Free Trial of the world's first personal postage meter!"

In a business world where time is money and image is everything, the new Personal Post Office™ gives you everything you need. You'll never go out for stamps again because postage refills by phone in under 30 seconds with total security. And you'll never use too much postage because the electronic scale eliminates wasted postage. You can even add your own promotional message to ensure your customers and prospects open *your* mail immediately. And despite its big features, the new Personal Post Office™ fits on a corner of your desk!

· 90 Days Free!
onal Post Office™

direct mail CD-ROM

SUBSCRIBERNET SAVINGS CARD

SELECT

SEND

SAVE 72% OFF THE COVER

BONUS: FREE Family Gaming MegaPac CD

Family PC™

☐ **2 YEARS** for just $19.95 (24 issues) SAVE 72%

☐ **1 YEAR** for just $12.95 (12 issues) SAVE 64%

☐ BILL ME LATER.

☐ PAYMENT ENCLOSED.

NAME (PLEASE PRINT) 4SBX5

ADDRESS

CITY STATE ZIP

Annual newsstand price $35.88. Non-U.S. add US$16 per year; Canadian GST included. Your FREE software will be shipped upon payment

LY Ext. PBFA

A Whale of a Movie

Fourth-graders combine clay and computers to create a claymation video

Project Name:
Whales' Tales Claymation Video

Grades:
4 to 6

Time Line:
3 weeks

Subjects Taught:
Science, language arts, geography, art, technology

"The excitement I see in the children when they're using technology is very rewarding. They're enthusiastic about wanting to lear

–Linda

THE VOTE IS IN, and it's unanimous: Claymation — the expressive animation of clay characters — is cool. From the original California Raisins, who entertained us with their soulful rendition of "Heard It Through the Grapevine," to today's Celebrity Death Match, an MTV show pitting clay versions of famous people against each other, claymation brings creatures to life in a way no other medium can touch.

So it's no wonder that when it was time to study whales, Linda Dombchik's fourth-grade class at the Hebrew Day School of Central Florida in Maitland, Florida, was excited about creating a claymation video of the great mammals strutting their stuff. In the end, their video featured whales sounding, breaching, skyhopping, flippering, sailing, lobtailing, and spouting. The claymation movie was part of Dombchik's larger unit on whales, which was a winner in the Ed's Oasis MasterSearch Contest (www.edsoasis.org).

To Participate:

* **Week 1:** Research whales (or any other animal easily rendered in clay). Dombchik's students used $19.95; Microsoft, 800-426-9400, www.microsoft.com). Your class could also try such Web sites as Zoom Whales (www.enchantedlearning.com/subjects/whales) or WhaleNet (whale.wheelock.edu). Collect information on their habitats, behaviors, characteristics, and activities.
* **Week 2:** On cardboard or fabric, paint scenic backdrops for your whales' movements. Sculpt your lead whale with nonhardening modeling clay. Consider building the sculpture around pipe cleaners for strength and flexibility.

Helpful Hint

To capture and edit video images on your PC, you'll need a video camera and a multimedia hardware/software package such as The Iomega Buz for Windows or Power Mac G3 ($199.95 and $299.95 respectively; 800-697-8833, www.iomega.com). Editing software is included. When you're done, you can save your masterpiece on videotape or in a digital format (such as QuickTime, MPEG, or AVI).

Visit our Web site —
http://www.familypc.com

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 66 BOULDER, CO

POSTAGE WILL BE PAID BY ADDRESSEE

FamilyPC™
PO Box 55411
Boulder, CO 80323-5411

"Get ready for the postage rate increase..."

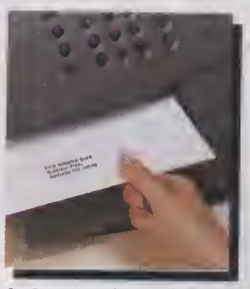
"...with a Free Trial of the world's first personal postage meter!"

In a business world where time is money and image is everything, the new Personal Post Office™ gives you everything you need. You'll never go out for stamps again because postage refills by phone in under 30 seconds with total security. And you'll never use too much postage because the electronic scale eliminates wasted postage. You can even add your own promotional message to ensure your customers and prospects open *your* mail immediately. And despite its big features, the new Personal Post Office™ fits on a corner of your desk!

Look At All You Get For 90 Days Free!

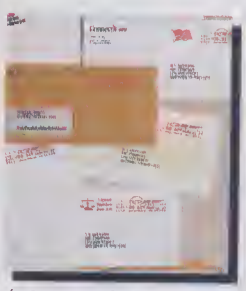
* Pitney Bowes Personal Post Office™
* Electronic Scale
* Business-building direct mail CD-ROM

1. Weigh envelope on electronic scale for exact postage



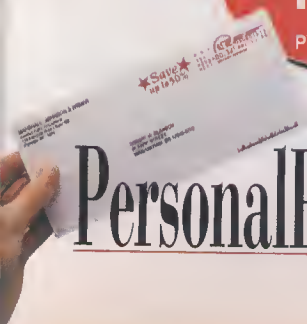
2. Insert envelope and admire instantly metered mail

3. Print a sales message or logo



4. Meter envelopes, flats and packages!

90 day FREE Trial
Special Offer for new Pitney Bowes customers



PersonalPost Office™

Pitney Bowes

Limited time offer, so call now!

1-800-5-PITNEY Ext. PBFA

www.pitneybowes.com/soho

It's Safe...
It's Fun...
It's Easy...
And it's FREE!

SURF MONKEY™

The First Web Browser For Kids!

★★★★ "Parents will feel comfortable knowing that their kids can browse the Internet under the watchful eye of Surf Monkey."
PC MAGAZINE

★★★★ "Web browsing gets a Nickelodeon look-and-feel... plus excellent safety features."
www.brainplay.com

"The idea behind Surf Monkey was to make browsing safe for kids... I love it!"
Family PC

Ages 7 & Up

FREE BROWSER ON FREE CD!

New Version is here! FREE e-mail, protected chat, safety filtering and links to 3000 approved kids sites! Just order or download from:

www.surfmonkey.com

Special Offer: The Club is ~~$29.95~~
NOW IT'S ALL FREE!

- SurfWatch Filtering
- Multimedia Email
- Protected Chat Rooms
- Kids' Site Directory

Now available on Diamond, Askey and Zoom modems!

MEDIALIVE!

SURF WATCH
Keeping kids safe on the 'net™

FOR WINDOWS. © 1998 MediaLive, Inc. Surf Monkey is a registered trademark of MediaLive, Inc. SurfWatch is a registered trademark of SurfWatch Software, a division of Spyglass, Inc. Microsoft Windows is a registered trademark or trademark of Microsoft Corp. in the United States and/or other countries. All other trademarks are the properties of their respective owners.

Web Sitings

THIS MONTH: Homework Help, Mortgages, Video and DVD Shopping, Internet Activities and Events, January Almanac

www.discovery.com

Discovery CHANNEL ONLINE

MANY WEB SITES AFFILIATED with television channels are little more than public relations sites with show listings. But Discovery Channel Online takes its invitation to "explore your world" seriously by offering stunning imagery, fascinating feature stories, and engaging activities you can't get anywhere else.

FamilyPC
WEB SITE OF THE MONTH

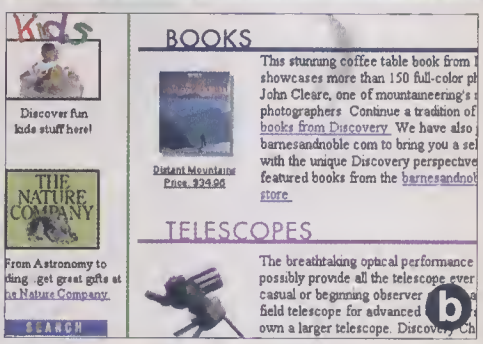
Lovers of adventure and nature will discover both in abundance at Discovery Channel Online.

Visitors to Discovery Channel Online will find it offers a wealth of Web-only content, most of which changes on a weekly basis. When we reviewed the site, it had just launched a science and technology news section, Discovery News Briefs, which you can read online or listen to using RealAudio. The Features area presents three new interactive stories each week, ranging from Keiko the killer whale's Iceland homecoming to the Dead Inventor's Corner's reports on influential inventions in history. Discovery archives dozens of past features, so you can browse at your leisure.

The site relies heavily on multimedia tools (you'll need the RealPlayer software from www.real.com and a 4.0 browser) and fun activities that illustrate scientific concepts, such as how a hurricane is born. Other goodies — like the animal cams trained on the shark tank at the Waikiki Aquarium and the orangutan habitat at the National Zoo — offer pure online entertainment.

Discovery also does an exceptional job with its live, real-time Expeditions, which make perfect teaching tools for home or school. Recent expeditions have included the month-long journey of migrating humpback whales and a cross-country bicycle trek from Moscow to the Caspian Sea. Expedition participants punctuate daily reports with audio, video, and photographs captured along the way.

Ironically, the site's connection to its parent TV channel is its weakest link. We found the daily TV listing page to be current, but the featured shows had not been updated in three weeks. It's also worth noting that a 28.8-kbps connection may not have enough oomph to enable you to enjoy the site's full complement of multimedia features, especially during peak hours. Nevertheless, Discovery Channel Online's commitment to high-quality original content and its elegant, user-friendly design make this site a must-see. —*Bonny Georgia*



Discovering the Channel Discovery Online manages to cover learning in a fun and fascinating way, whether it's (**a**) with interactive weather generators like Hyper Hurricanes, (**b**) shopping for interesting artifacts and books, (**c**) playing challenging mind games, or (**d**) using one of the site's many animal cams to give you a creature's-eye view of the planet.

CHECK OUT MORE

✔ **A+ Math**
www.aplusmath.com
Games and flash cards: You can put in a math problem and instantly tell if it's right.

✔ **Homework Help**
www.startribune.com /homework/
You post a question, and teacher volunteers answer it (or provide a site that can answer it) within 24 hours.

✔ **Shakespearean Homework Helper**
hometown.aol.com /liadona2/shakespeare .html
Wherefore art the answers to my homework questions about the immortal Bard?

✔ **Ask Dr. Universe**
www.wsu.edu/DrUniverse/
Ask any question you like, or scroll through the list of existing Q&As. Answers might take a while – Dr. U says she's swamped.

✔ **Ask Dr. Math**
forum.swarthmore.edu /dr.math/
Answers to any level math question. Search the archives, or ask a new question.

✔ **Homework Help**
members.aol.com/Jiskha /Homework_Help/
Teachers answer most submitted questions within a week.

✔ **Pitsco's Ask an Expert**
www.askanexpert.com /askanexpert/
A directory of links to people and Web pages to answer your questions. Twelve categories and over 300 sites.

EDUCATION

Homework Help

It's 9:00 P.M., your child just told you he has a report on current events at the Kremlin due tomorrow, and your encyclopedia set only goes as far as Krushchev. Hop onto the Web to get the homework help you need in current events, math, geography, or any other topic.

NoSweat.com

www.nosweat.com

With 3.4 million reference pages covering 2200 subjects, this is the biggest free homework helper on the Web. NoSweat.com is made up of Homework Central Jr. (first to sixth grade), Homework Central (seventh to twelfth grade), and Encyclopedia Central (college and beyond). All three levels work in the same straightforward way: Start by choosing a branch of study, from the Arts to World History to Science, and then keep clicking on increasingly specific topic areas until you get to the information you need.

Need more information? Try the NoSweat .com search engine (www.nosweat.com /search/) to find appropriate Web sites on your topic. Still stumped? To get a pointer in the right direction, e-mail your question to one of the site's 140 experts.

This site is loaded with reference tools, too. NoSweat will take the perspiration out of finding homework assistance.

➲**Coolest Click:** How to Take Notes Online. Includes a reminder about citing sites.

Homework Helper

www.homeworkhelper.com

Although Web sites can be a tremendous resource for homework help, information that first appeared in printed publications is often cited as more reliable and of better quality (after all, they've been at it for a long time). At Homework Helper, kids enter a question or keyword and then select the kinds of sources they would like back in response: magazines, maps, books, newspapers, news wires, TV and radio transcripts, or pictures. Search results include the name of the source, author, date, size of the document, and reading level — so you don't waste time downloading inappropriate material. (Although the site is free, some sources come from the subscription-based Electric Library; see "Paying for Education.")

➲**Coolest Click:** Result Settings. A tool for sorting search results by criteria important to you.

—Cristine Santo

Paying for Education

Good help doesn't come cheap, and that goes double for homework help. While free sites obviously exist to give your kids a leg up on the three Rs, several subscription sites may provide even better help.

Electric Library
You'll feel as if you're in front of the digital microfilm machine at the college library. Compose a question in plain English and get results from over 150 newspapers, hundreds of magazines, even news wires and classic books.
Electric Library, *www.elibrary.com; 30 days free; monthly subscription, $9.95; annual subscription, $59.95.*

homeworkhelp.com
Individuals or groups can sign up to take advantage of help and lesson plans on everything from basic topics to advanced physics. Many of the help tips and lessons are tied into the Super Tutor CD-ROM series (buy a CD-ROM and get a free three-month membership).
HomeworkHelp.com, *www.homeworkhelp.com; 30 days free; individual monthly subscription, $9.95.*

Northern Light
Usually lumped in with the search engines, Northern Light actually serves up articles from hundreds of publications, most not found online. You pay only for what you use.
Northern Light, *www.northernlight.com; $1 to $4 per article.*

–Eric Griffith

MORE ONLINE Visit www.familypc.com for a categorized list of hundreds of family-friendly Web sites.

Shop the right way. With reviews and articles on thousands of toys, games, software titles, family videos, and more. All at the click of a mouse.

www.brainplay.com

brainPlay.com

Smart Choices for Growing Kids

ZDNet™

believe in technology™ ZD™

Believe in Technology, ZDNet, the ZDNet logo and the ZD logo are trademarks of ZD Inc.
All other names and logos are the trademarks of their respective owners.

Another Type Z Personality.

So, I ditch my job in securities and move to the Keys. Start a business building handmade graphite fly rods and brass reels.

My wife? Loves the town. Thinks I'm a little wacky. Wonders where I'll find my customers.

Me? I'm planning to go worldwide the whole time.

I pop into ZDNet. Get some key advice on handling sales tax with interstate customers. Then, I hit the E-Business Channel, and—bam!—I find a total Web storefront solution in about five minutes and four clicks.

Now, I'm reeling in business from all over the world, including my buddies back on the trading floor.

So, I'm thinking I'll take the rest of the day off and do a little fishing myself.

I love it when I get stuff done.

Are you Type Z? Let's see.

Visit **www.zdnet.com/typez** and tell us why you think you're Type Z. If our judges agree, you could win a Fanta-Z adventure trip for two.

Type Z (n): A person who embraces change and uses technology to make work—and life—easier. Gets lots done, without looking burdened. Knows a lot, but isn't a know-it-all. Asks good questions; finds answers fast. Uses ZDNet: The High-Tech Hub. (see also: leaders, decision makers, trendsetters)

www.zdnet.com ZDNet

CHECK OUT MORE

✔ **E-Loan**
e-loan.com
An excellent mortgage site with a loan finder, rate tracker, credit checker, and more.

✔ **GetSmart**
www.getsmart.com
This site takes the complexity out of borrowing money by providing free, objective information.

✔ **ConsumerInfo.com**
www.consumerinfo.com
Consolidated credit information from all the credit report services.

✔ **Tenant Screening Credit**
www.tsci.com
Reports on prospective tenants for landlords.

✔ **Moving Center**
www.movingcenter.com
A Web site that looks like a board game, with information on many aspects of moving.

✔ **DataQuick Neighborhood Report Center**
products.dataquick.com/consumer/
Find out a house's current market value or about a neighborhood. Reports start at $5.

✔ **School Match**
www.schoolmatch.com
Know about schools nationwide before you move, with these independent assessments starting at $10.

✔ **Loan Guide**
www.loanguide.com
Use the interest rate notification program: Tell them the rate you want, and they'll e-mail you when it hits.

FINANCES

Mortgages/Home Loans

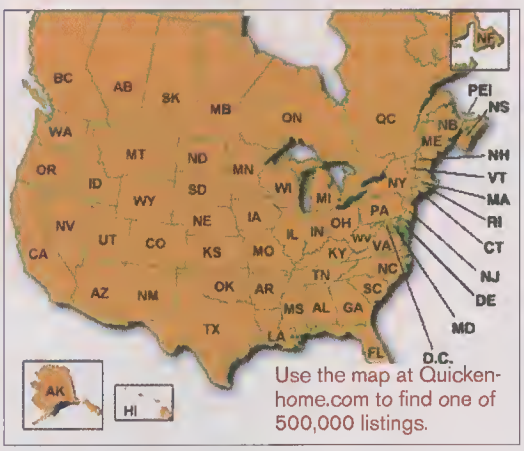
Finding the right house is only part of getting a new home — you also have to pay for it. Why not get the information you need on mortgages and home loans online?

QuickenMortgage

www.quicken.com/mortgage/

Quicken Mortgage provides the necessary background information for future house hunters. Find out how to get your credit in good shape, buy the house of your dreams, get a deal on a repossessed home, get a handle on mortgage basics, and check on current interest rates. Helpful interactive tools reveal how much you can afford and what loans you qualify for. Then simply apply online. Real Estate news, guest columnists, and Q&As round out the site.

➲**Coolest Click:** Debt Reduction Planner. Find out if you have too much debt.



Use the map at Quickenhome.com to find one of 500,000 listings.

You'll find the answers to scores of questions on such topics as ARMs, Down Payments, Loan Costs, Loan Terms, Refinancing, and Rates and Points. Once you've covered the basics, delve into the in-depth guides on Choosing a Mortgage, Coping with Credit, and Solving Appraisal Problems. The Planning Calculators let you figure out how much you can afford or see if it's time to refinance. Then compare loans from different lenders or apply for a loan online.

➲**Coolest Click:** Top Tips. Five mortgage tips that will save you time and money.

HomeShark

www.homeshark.com

This site attacks a large amount of mortgage information and spits it out in a clear, concise format. HomeShark lets you shop mortgage rates, check home listings, find an agent, prequalify for a mortgage, or apply for a mortgage.

If you don't want to jump into the Quick Links, browse the site by category: Buyers, Renters, Realtors, or Owners. These links bring you to relevant tools and articles. For example, Buyers lets you find out how much house you can afford, search over 1 million home listings, get an estimate of what a prospective home is worth, and learn about down payment strategies. Be sure to check out the glossary of real estate and mortgage terms — even though you'll likely have a lawyer, it's good to know what all that jargon means.

➲**Coolest Click:** Neighborhood Information. Compare communities based on schools, demographics, housing costs, and other criteria.

—Cristine Santo

Microsoft HomeAdvisor

www.homeadvisor.com

Microsoft HomeAdvisor has it all when it comes to helping you find a house and a loan. Although there's plenty of interest in the section for finding a home, it's the Financing Section that's truly impressive.

Start at the Advisor area to get a sense of the world of home loans.

WINDOWS 95
WINDOWS 3.X

SMART HOME MANAGER™

WOW!

ALL-IN-ONE SOFTWARE!

Over 100 Features including:

- ✓ Medical Records
- ✓ Address Book
- ✓ Household Inventory
- ✓ Insurance Policies
- ✓ Warranty Records
- ✓ Password Tracker
- ✓ Plants & Flowers
- ✓ Automotive Repairs
- ✓ Books/Magazines
- ✓ Web-Site Tracker
- ✓ Complete Financial Tracking
- ✓ Check Printing & Reconcile
- ✓ Financial Calculators
- ✓ Calendaring & Scheduling
- ✓ Loans & Investments
- ✓ Hobbies & Collections
- ✓ Exercise Log, Recipe Book
- ✓ Project Planning
- ✓ Wine Lists, Daily Journal
- ✓ Over 180 Reports and More!

30 Day Money Back Guarantee! • www.surado.com/shm.html

Top Reviews In:
- *PC Computing*
- *Fortune*
- *PC Magazine*
- *Computer Shopper*

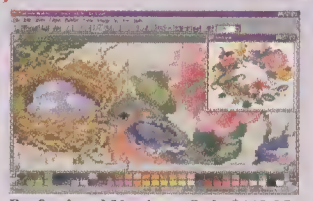
~~$59.95~~
$39.95
(Plus $5.95 S&H)
Code: SHM020-FPC

ORDER TODAY!
1-800-478-7236
Mail: Surado Solutions, Inc.
2060 Chicago Ave, Ste C5
Riverside, CA 92507
CA Residents Add Sales Tax

JUST RELEASED!

Pattern Maker for cross stitch

Create your own cross-stitch patterns on a PC!
For both the hobbyist & professional.
a Windows™ program



Features Include:
- 150 colors per pattern
- Pattern sizes up to 999x999
- Full, half, quarter, back stitches and French knots
- Text entry (word processing) feature
- Display or print pattern as stitches, symbols or solids
- Capable of displaying several views of a pattern at one time
- Stitch usage summary
- Print preview and color printing
- Graphic image importing/tracing (BMP, PCX, GIF, and more)
- Easy-to-use Image Importing Wizzard
- Insert a pattern into other documents using Windows OLE
- User-selectable fabric color, grid style and stitch size
- DMC, Anchor, J&P Coats floss lists provided
- Full editing capability (undo, cut, copy, paste, move, flip, rotate, flood fill and fill back-stitched area)

Professional Version - Only $119.95
Standard Version available for $59.95 - call for details
Visa/MC/Amex/Discover, check & money orders accepted.
Money Back Guarantee

Now on CD ROM

HobbyWare, Inc.
P.O. Box 501996
Indianapolis, IN 46250
(800) 768-6257
(972) 562-5411
Fax (972) 562-9287
Visit us on the
www.hobbyware.com

MAKE MONEY WITH A COMPUTER

Start A Business At Home

Low Start-Up Cost

- Sesame Street,® Warner Bros., DC Comics, NFL,™ Power Rangers,™ Where's Waldo?, ©Marvel Comics
- Religious, Ethnic, Foreign Language Books
- No Computer Experience Necessary
- Also Personalized:
  - ✓ First Name Meanings
  - ✓ Personalized Clocks
  - ✓ Family Name Histories
  - ✓ Business Cards

FREE Information
1 800 275 7770
S. Africa 27 11 485 1789 — U.K. 44 1379 641444
Austria 0043 2732 72073 — Australia 02 9337 2271
Argentina 54 1 799 1558 — Spain 34 1 367 3211

BEST PERSONALIZED BOOKS
Best Plaza, 4201 Airborn Drive
Dallas, Texas 75248 U.S.A.
Tel 972 250 1000 • Fax 972 930 1010
www.bestpersonalizedbooks.com

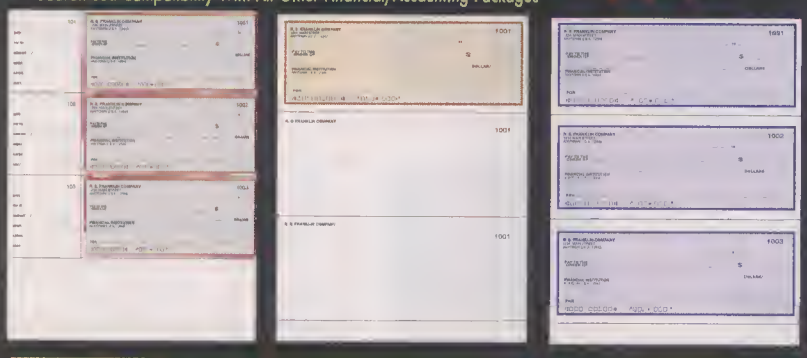
™CTW Muppets Henson ™Saban ®Warner Bros. ™NFL ©Marvel Comics Where's Waldo? ©DC Comics *Best Restrictions apply on language, title, advertising, availability, distribution, and international territory

DESIGNER CHECKS™ INTRODUCES .....

LASER/INKJET CHECKS

QUICKEN COMPATIBLE as low as $24.95

Guaranteed Compatibility With All Other Financial/Accounting Packages



WALLET SIZE W/STUB | BUSINESS SIZE W/VOUCHER | BUSINESS SIZE

FOUR COLORS AVAILABLE: Classic Blue, Tan, Classic Green, Prestige

With First Order
FREE MOUSE PAD
& FREE CHECK SAVER

COMPATIBLE WINDOW ENVELOPES AVAILABLE
250 $19.95
500 29.95

100% SATISFACTION GUARANTEED

Designer Checks www.hotnew.com/checks • 1-800-239-4087
fax: 1-800-774-1118 • e-mail: info@check.hotnew.com

P01FP5Q7

How to Order:
1. Enclose reorder form or voided check from your existing check supply, noting any changes.
2. Include deposit slip from existing check supply.
3. Choose payment method: a.) check payable to Designer Checks or b.) credit card payment
4. Complete the order form and mail with items 1, 2,and 3 to: Designer Checks P.O. Box 9222 Anniston, AL 36202-9222
(Checks will ship to the address printed on the checks unless otherwise specified.)

Your software: _____ Version: _____
Starting Check Number: _____

Payment Information
❑ Check payable to Designer Checks ❑ Visa
❑ Master card ❑ American Express Exp Date _____
Credit Card# _____
Name on Credit Card _____
Cardholder's Signature _____
Please check that your credit card information has been filled in completely

Wallet & Bus. 3 per page	
Qty	Price
250	$24.95
500	44.95
1000	64.95
2000	94.95

Business Size w/voucher		
Qty	Single	Duplicate
250	$44.95	$74.95
500	59.95	89.95
1000	84.95	144.95
2000	129.95	234.95

Deposit Slips (200 Padded)	
Size	Price
Business	$9.95
Personal	6.95
Envelopes	
Qty	Price
250	$19.95
500	29.95

Description	Calar	Quantity	Price
		Shipping & Handling	6.00
UPS 2-Day Air (includes in-plant rush) optional-$7.00			
AL residents add 8% Sales Tax			
		Total	

CHECK OUT MORE

✔ **DVD Express**
www.dvdexpress.com
The newest store selling DVDs online.

✔ **KidFlix**
www.kidflix.com
Buy family-friendly home videos for kids.

✔ **Value Video**
eazy.net/value_video/
Specializes in sales of hard-to-find, used VHS videos in their original boxes.

✔ **Classic Hollywood**
www.classiccinema.com
Rare movie and television programming for sale; searchable by keyword or genre.

✔ **Critics' Choice Video**
www.ccvideo.com
New releases and collectors' videos, including out-of-print titles.

✔ **Direct Video**
www.directvideo.com
More DVDs and videos to buy.

✔ **Home Film Festival**
www.homefilmfestival.com
Film rentals and sales of foreign films, independents, documentaries, and Hollywood's best.

✔ **Michael Blackwood Productions**
www.panix.com/~blackwoo/
Documentaries on the arts for sale.

✔ **Best Video**
www.bestvideo.com
The more you buy, the more you save.

✔ **VideoServe.com**
www.videoserve.com
Mega-cheap specials – as low as 1 cent.

WEB SHOPPING

Videos and DVD

In the mood for a night in with a movie? If you're willing to wait a couple of days, you'll find online rental or purchase to be an inexpensive and easy alternative to driving to the local rental place.

Reel.com

www.reel.com

If the videotape from Reel.com's movies (85,000 for sale and 35,000 for rent) were unwound and laid end to end, it would reach — well, a long way. Don't worry about being overwhelmed, though: This site has features to help you sort your choices. Quick Search will help you find a specific title or learn about the filmography of a particular director or actor, while Smart Search will let you search by format (new, used, laser, DVD), price, genre, time period, or rating.

Reel.com rates films on 14 essential elements, including action, drama, special effects, even offbeat energy; it also has critics' reviews. You can rent films at Reel.com for $4.50 per tape per week (plus shipping: $3 per shipment plus 95 cents per video, via USPS Priority Mail). You've got seven days to watch them before returning them using the same box they arrived in.

➲**Coolest Click:** Movie Matches. Will you like a new movie? The movie matcher can tell you for sure.

NetFlix.com

www.netflix.com

NetFlix has more than 2000 DVD movie titles — almost every title available — to buy or rent. Search for the movies you want, drop them into your virtual cart, and then check out with the 100 percent secure checkout system. All movie entries come with short descriptions and Film Facts about the actors and directors.

The cost may depend on your viewing habits. If you rent one movie at a time and keep it for just 2 days, fees for rental ($4) and shipping ($2 on the first DVD, $1 each after, via USPS Priority Mail) are pricey; movie buffs who take out several movies for a whole week will see more savings. When the rental time is up, drop the disc into a prepaid mailer and send it off. If you decide to keep the disc, e-mail NetFlix and it'll bill you the purchase price minus the rental fee.

➲**Coolest Click:** Remind Me. You'll never forget the name of the movie you said you wanted to see.

BigStar.com

www.bigstar.com

BigStar.com feels like a video retailer and a Hollywood gossip magazine. You should start with a Big Search of the 100,000 titles of videos or DVDs for sale (BigStar doesn't rent). Check out BigPicks for the site's favorite movies, and Big Selections for the ever-changing assortment of titles at 20 to 25 percent off. In the Big Fun section, read up on movie news such as studio deals, actors' tiffs, and movie trends; find live celebrity chats; and see which ones share your birthday.

BigStar is best suited to mainstream movie watchers who have a good idea of what they'd like to buy. But you'll find great specials here — BigStar has previously given away copies of *Titanic* and *The X-Files* with orders.

➲**Coolest Click:** ABCBigStar. A nice collection of suggestions for children's videos.

—Cristine Santo

EVENT GUIDE: SUPER BOWL XXXIII

On Super Bowl Sunday, even people who don't usually care about football have been known to paint their faces, wear team colors, and shout 'til they're hoarse (even if it's just to be heard above the din of the Super Bowl party). So before the game comes, suit up with some history, trivia, stats, and stories. But Super Bowl Sunday isn't just about the game – it's about your friends and family eating just about anything put in front of them. While this may tempt you to "experiment" with chocolate-covered ants or tofu-spirulina casserole, why not try an unusual version of a favorite Super Bowl party food: chili. The Web offers options that will put some sizzle in the party, just in case the game isn't doing it. *–Cristine Santo*

NFL.com www.nfl.com
Official site of the NFL: Super Bowl trivia, history, and clips.

The Sporting News: NFL
www.sportingnews.com/nfl/
News, expert commentary, stats, bios, and more.

NFLfans.com www.nflfans.com
NFL fan information and entertainment by a grassroots fan organization.

Silly Sports Pro Football News
www.sillysports.com
An irreverent look at pro football.

Pro Football Weekly
www.profootballweekly.com
NFL news, opinion, previews, predictions, and chats.

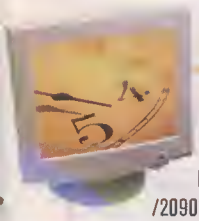
South Florida Super Bowl XXXIII Host Committee
www.superbowlxxxiii.org
No tickets to the big game? Don't feel left out. Check out the pre–Super Bowl events described here.

Giant Super Bowl Photos
www.tikipub.com/panoramics/
Photos – 3 feet wide – of football's most historic moments; $50 each.

SOAR Chili Recipes
soar.berkeley.edu/recipes/chili/
Over 260 chili recipes, including Capitol Punishment Chili and Chicken Pumpkin Chili.

Epicurious Chili Recipes
food.epicurious.com
442 options, including Chili Con Carne with Chili Cheddar Shortcakes and Chili Cornmeal Skillet Pie.

Chile Today, Hot Tamale
www.chiletoday.com
Order chile pepper products online (including barrels of seasoned, hot pretzels) and get a hot education on chiles, too.



5-Minute Internet Activities

El Niño Hangman
hyperion.advanced.org/20901/main_heavy.htm

This cute little hangman game has a few things to say about El Niño. Part of a site created by three high school students, it's dedicated to educating people about the world climate phenomenon.

Avery Kids Picture-Picture Game
www.avery.com/kids/picturegame.html

Test your ability to notice subtle differences between two seemingly identical pictures. Each pair of pictures has nine discrepancies. With 27 scenes to choose from, the game is riveting.

Calendarz
www.calendarz.com

Share your personal calendar with all of the members of your family on the Web. This free site lets you note the dates and times of any important events and embed links and pictures.

SEA TURTLE SURVIVAL LEAGUE

To access your calendar, just type in your unique calendar URL.

Sea Turtle Satellite Tracking Program
www.cccturtle.org/satwelc.htm

Follow the movements of sea turtles saved by the National Aquarium in Baltimore, with history and a map showing where the Loggerhead turtles have been since being released.

Peanut Butter and Jelly Wars
www.gamescene.com

Peanut Butter and Jelly seek to smear each other in this creative Shockwave version of Go/Othello/Reversi. Select your side and then try to cover the game board by cornering your opponent.

—Sam Mead

J A N U A R Y

FamilyPC's *Web Almanac*

January begins the new year — and it's a year that will see **two blue moons** (one on January 31 and one on March 31), a lunar event that happens once every 19 years (www.moontribe.org/phase.html). **Universal Letter-Writing Week** starts January 8, so write a letter to someone today. For inspiration, you can read some **Unforgettable Letters** at www.usps.gov/letters/welcome.htm. The love letters are especially interesting, so snoop around the letters of the rich, famous, and historical. In terms of closing the deal, however, **January is the month with the fewest weddings**. But you can visit www.weddingnetwork.com to get some planning tips anyway.

Did You Know? After 127 years, San Francisco got its first female cable car grip operator in 1998.

January 1: Hank Williams, Sr., Dies

Country legend Hank Williams, singer of "Hey, Good Lookin'," died in 1953 at age 29. Read about his lonesome life at www.hankwilliams.com.

January 3: Dylan Returns

In 1974, after eight years of seclusion ("the lost years"), Bob Dylan went on tour with The Band for 39 dates in 25 cities. Hear the resulting album at www.punkhart.com/dylan/.

January 4: Louis Braille Birthday

Braille invented a system of writing for the blind that was largely ignored in his lifetime. He died in poverty. Learn the Braille alphabet at www.nyise.org/blind/america2.htm.

January 9: John Beargrease Sled Dog Marathon

This 500-mile race commemorates the legendary Chippewa mail carrier of Lake Superior. See the race route at www.beargrease.com.

January 12: Jack London's Birthday

London was born in San Francisco in 1876. Read about this man's man and *Call of the Wild* author's fascinating life at sunsite.berkeley.edu/London/.

January 17: Cable Car Invented

Inspired by an accident involving a horse-drawn streetcar, Andrew Hallidie invented and received a patent for the cable car system in 1871. Watch cable cars work at www.sfcablecar.com.

January 20: Age of Aquarius

The sun sign of Aquarius, the Water Bearer, begins today in the zodiac calendar. Aquarians have generous natures but become aggressive if restricted. Find your sign at www.astrology.com.

January 23: *Donny & Marie* Premiere

The show starring the toothy brother-and-sister Osmond act premiered in 1976. At 18 and 16, they were the youngest hosts of a prime-time program. Relive the glory at www.osmond.com.

January 26: Dental Drill Patented

George G. Green of Kalamazoo, Michigan, patented the electric dental drill in 1875 (earlier drills were powered by foot pedal). Face your fear of the drill by looking up *Marathon Man* at www.imdb.com.

January 27: Vietnam War Ends

Hundreds of thousands of combatants died before the U.S. and North Vietnam signed a peace agreement in Paris in 1973. Visit a virtual Vietnam memorial at www.vietvet.org/thewall.htm.

January 29: First Librarian of Congress

The Library of Congress hired John Beckley as the first librarian of Congress on this day in 1802, two years after the library opened. Find out why at www.loc.gov.

—Julia Lynch

Tell us about your special Web event via e-mail at FPCEvent@aol.com. Plus, see the daily Web Almanac at www.familypc.com/almanac/.

FamilyPC (ISSN 1076-7754), Volume 6, No. 1. *FamilyPC* is published 11 times a year, plus a special Shopping Secrets issue in November. *FamilyPC* is owned by ZD, Inc. Periodicals postage paid at New York, NY, and additional mailing offices. POSTMASTER: Send address changes to *FamilyPC*, P.O. Box 55414, Boulder, CO 80322-5414. Canada Post International Publications Mail Product (Canadian Distribution) Sales Agreement No. 1058665. PERMISSIONS, REPRINTS: Material in this publication may not be reproduced in any form without permission. If you want to quote from an article or use *FamilyPC*'s logo in conjunction with a quote, write Chantal Tucker at Ziff-Davis in New York or fax her at 212-503-5475; for information, please contact Ziff-Davis Reprints at 800-825-4237. MAILING LISTS: Periodically we make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write us and include a copy of your mailing label.

PHOTOGRAPH: PHOTODISC

We can custom-build a gift for anyone.
(Not even the folks at the North Pole can claim that.)

Every Gateway client is unique, and so is every Gateway PC. These systems are just examples of what we can build for you.

The Family Foundation G6-350

- Intel® Pentium® II Processor 350MHz with 512K Cache
- 64MB SDRAM
- EV700 .28 Screen Pitch 17" Monitor (15.9" viewable)
- 8MB AGP Graphics
- 10GB Ultra ATA Hard Drive
- DVD-ROM Drive & MPEG2 Decoder
- 3.5" Diskette Drive
- SoundBlaster® AudioPCI™ 64D
- Bastan Acoustics® BA635™ 3-Piece Speaker System
- U.S. Rabatics® 56K² Voice Winmodem
- Micra-Tower Case
- MultiFunction Keyboard & Mouse
- Microsoft® Windows® 98 & MS® Home Essentials® Software
- Gateway Gold℠ Service for G-Series PCs[3]

As low as $45/mo. for 48 mos. or $1599[4]

Friend of the Family G6-450

- Intel Pentium II Processor 450MHz with 512K Cache
- 64MB SDRAM
- EV700 .28 Screen Pitch 17" Monitor (15.9" viewable)
- 16MB AGP Graphics
- 10GB Ultra ATA Hard Drive
- DVD-ROM Drive & MPEG2 Decader
- 3.5" Diskette Drive
- SoundBlaster AudioPCI 64D
- Bastan Acoustics BA635 3-Piece Speaker System
- U.S. Robotics 56K² Vaice Winmodem
- Mid-Tower Case
- MultiFunctian Keybaord & Mouse
- MS Windaws 98 & MS Home Essentials Saftwore
- Gatewoy Gold Service for G-Series PCs[3]

As low as $56/mo. for 48 mos. or $1999[4]

The Far-Flung Family SOLO® 3100LS (FireAnt)

- 12.1" SVGA TFT Color Disploy
- Intel Pentium II Processor 233MHz with 512K Cache
- 32MB SDRAM (expandable to 160MB)
- 2.5MB 256-Bit Grophics Accelerator
- Integroted DVD-II Drive
- Integrated V.90 Modem
- Externol 3.5" Diskette Drive
- 2GB Ultra ATA Hord Drive
- Lithium Ion Bottery & AC Pock
- USB Port, CordBus & Zoomed Video Support
- Integrated 16-Bit Sound & Stereo Speokers
- Leather Portfolio Corrying Cose
- Full-Size Keybaard
- EZ Point® Painting Stick
- MS Windows 98 & MS Office 97, Smoll Business Edition plus Boakshelf® 98
- LopLink® V.7.5 far Windows 98 & McAfee® VirusScon
- Gatewoy Gold Service far Partoble PCs[3]

As low as $70/mo. for 48 mos. or $2499[4]

Add on specific packages to customize your Gateway PC to fit your family's needs.

- **Audia Entertainment -** Philips® CD-RW (CD-Rewritoble) Drive, Boston Acoustics MediaTheoter™ 3-Piece Speaker System **$339**
- **Digital Phata Pack -** Epsan® Phota PC™ 550 Calor Digital Camero, Philips CD-RW **$419**
- **Family Entertainment -** Kid's BackPack™ Softwore, Micrasaft Actian Titles, Thrustmaster® Tap Gun™ USB Jaystick **$239**

Internet access provided by gateway.net℠ for $14.95/mo.[5]

For the latest prices, call us or visit our web site:

call 1-800-555-2068

www.gateway.com/yourware

ad code: 10007

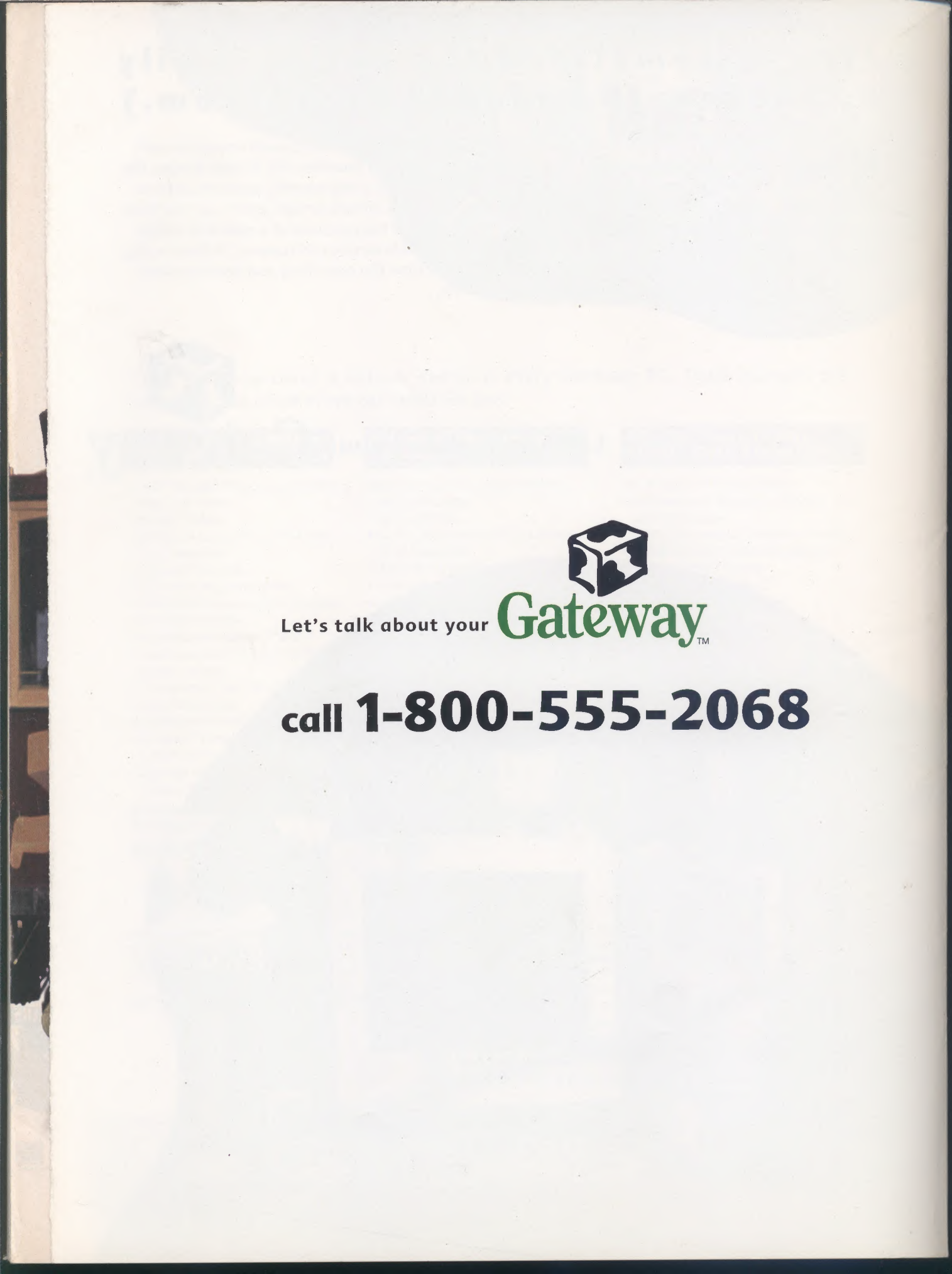
© 1998 Gateway 2000, Inc. All rights reserved. Gateway, Solo and the Gateway stylized logo are trademarks, and Your:)Ware is a service mark of Gateway 2000, Inc. The Intel Inside Logo, Intel and Pentium are registered trademarks of the Intel Corporation. All other brands and product names are trademarks or registered trademarks of their respective companies. All prices and configurations are subject to change without notice or obligation. Prices do not include shipping and handling or any other applicable taxes. Many Gateway products are engineered to Gateway specifications, which may vary from retail versions of the software and/or hardware in functionality, performence or compatibility. 1. Gateway purchases will qualify for the Your:)Ware program by 1) financing through a Gateway authorized lender; 2) purchasing six months of gateway.net℠; and/or 3) buying an additional software bundle. Trade-in available at any time between the first day of the 24th month and the last day of the 49th month after delivery of Your:)Ware product. Trade-in credit is only available if you purchase a new Gateway product. Gateway will give you the average wholesale value on the Your:)Ware product, in good condition as determined by Gateway's sole discretion, using the then current *Orion Blue Book* or another, similar commercially reasonable industry standard determined by Gateway. Other terms and conditions apply. Call our toll-free number for details. 2. Maximum data transfer rate dependent upon certain variables, including particular modems with which you are communicating, telephone lines, communications software and communications protocols. 3. Call 1-800-GATEWAY or write us at Gateway Terms & Conditions, P.O. Box 1951, North Sioux City, SD 57049-1951 for a free copy of our limited warranty, on-site service agreements, and installation agreements. If your Gateway technician determines an on-site visit is necessary, on-site service will be provided for product purchased and located in the continental United States, Alaska, Hawaii, Puerto Rico and Canada (excluding mice, keyboards, monitors and Solo portables). On-site and installation services are administered by PC Technology Services, Inc. See agreements for specific terms and limitations. 4. Loan financing available on approved credit through independent lender. Payments based on 48-month term and an Annual Percentage Rate as low as 14.9%. Your APR may be higher. 2% eccess check fee ($2min./$15max.); not applicable to Gateway purchases. 5. $14.95 gateway.net pricing based on 6-month commitment. $15 fee for early cancellation. $14.95 for unlimited hours not available in all areas.

Finally something the entire family can share. (Besides the bathroom.)

intel inside
pentium® II PROCESSOR

Just think: one gift that can make everyone happy. Let us build you a computer with hardware and software customized for every family member: the budget keeper, the gaming fanatic, the Internet surfer, etc. All it takes is a low monthly payment with no money down. And after two years, as your family grows, or just grows up, you have the option to trade your Gateway™ PC in toward the purchase of a new one[1]. In the meantime, we'll always be standing by with flexible service and support, 24 hours a day, seven days a week, online, on-call or by fax. Now the only thing you need to worry about is who gets to use the computer first.

Let's talk about your Gateway™


Let's talk about your Gateway™
call 1-800-555-2068